Chemicals Chemicals Services Catalyst & Internal Media Changeout Internal Media Changeout Work Category: 10101010S

Provision of manpower, materials, consumables, equipment and facilities necessary for Unloading, Cleaning, Internal Parts Repair and Loading of Internal Media (e.g. clay, resin, salt, ACF, etc.) of vessel (e.g. Moisture removal, Chloride removal, Mercury removal, Sulphur removal, Molecular sieve, Propane treater, Butane treater, Feedgas drier, etc.) Work Category's Description:

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|---------------|---|--|---|--|-----------------------------------|-----------------|------------------------|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 10018 | | E.g. CIDB, DOSH | E.g. 130, AFI Standard |
| ., | SPM or Equivalent with Confined space certification (AGTES – Authorized Gas Tester & Entry Supervisor) | | Proper office setup in Malaysia Workshop | Vacuum machine (own/lease) Hopper (own/lease) Personnel rescue equipment (own/lease) | | | |

Chemicals Chemicals Services Catalyst & Internal Media Changeout Moving Bed Work Category: 10101011S

Provision of manpower, materials, consumables, equipment and facilities necessary for unloading, cleaning, internal parts repair and loading of moving bed reactor or moving bed absorber inclusive of sock loading (e.g. continuous catalyst regeneration (CCR), etc.) Work Category's Description:

Mode of Operation: Self-operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---|------------|--|---|----------------------|----------------------------|-----------------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | 3 | 3 | | E.g. CIDB, DOSH | 3, |
| Supervisor | SPM or Equivalent with Confined space certification (AGTES – Authorized Gas Tester & Entry Supervisor) | | | 1. Vacuum machine (own) 2. Hopper (own) 3. Sieving machine (own) 4. Inert entry equipment (own) 5. Personnel rescue equipment (own) | | | |
| Technician | SPM or Equivalent with Confined space certification (AESP – Authorized Entrant & Standby Person) | | | | | | |

Work Category: Chemicals
Chemicals Services
Catalyst & Internal Media Changeout
10101012S Multi Bed

Work Category's Description:

Provision of manpower, materials, consumables, equipment and facilities necessary for unloading, cleaning, internal parts repair and loading of multi bed reactor or multi bed absorber with single layer or multi layer catalyst inclusive of sock loading and/or dense loading (e.g. adsorbent chambers, distillate hydrotreating, hydrocracking, etc.)

Mode of Operation: Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|---|--|--|--|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | L.g. Warenouse, Dockyaru | L.g. 10013 | | | L.g. 100, Al I otalidard |
| Supervisor | SPM or Equivalent with Confined space certification (AGTES – Authorized Gas Tester & Entry Supervisor) | | Proper office setup in Malaysia Workshop | Vacuum machine (own) Hopper (own) Sieving machine (own) Inert entry equipment (own) Personnel rescue equipment (own) | | | |
| Technician | | 5 years experience in catalyst changeout services | | | | | |

Chemicals Chemicals Services Catalyst & Internal Media Changeout Single/Fixed Bed Work Category: 10101013S

Provision of manpower, materials, consumables, equipment and facilities necessary for unloading, cleaning, internal parts repair and loading of single bed reactor or single bed absorber with single-layer or multi-layer catalyst inclusive of sock loading and/or dense loading (e.g. naptha hydrotreating, isomerisation, pressure swing absorber, steam reformer, methanol reactor, ammonia primary reformer, Residue Fluid Catalytic Cracking (RFCC), etc.) Work Category's Description:

Mode of Operation: Self-operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---|--|--|--|-------------------------------|-----------------------------------|--------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | L.g. Warenouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100; Al 1 otalidard |
| Supervisor | SPM or Equivalent with Confined space certification (AGTES – Authorized Gas Tester & Entry Supervisor) | 5 years experience in Mechanical maintenance work in Oil and Gas Industry | Malaysia le 2. Workshop 2 3 le 4 | Vacuum machine (own / lease) Hopper (own / lease) Sieving machine (own / lease) Hease) Hert entry equipment (own / lease) Personnel rescue | | | |
| Technician | | 5 years experience in Catalyst Change-Out services | | equipment (own / lease) | | | |

Work Category:

Chemicals
Commodity Chemicals
Resins
10112510P
Ion Exchange Resin

Work Category's Description:

To supply and provision of associated support services for lon Exchange Resin

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|--|-------------------------------|-----------------------------------|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | |
| | | | | | Principal to have minimum 5 years experience in manufacture, supply and provision of associated services and minimum 10 proven track record in the field of Ion Exchange Resin | | | |

Work Category:

Chemicals

Process Chemicals

Additives

10141011P

Anti - Blocking Agents

Work Category's Description: To supply and deliver Anti - Blocking Agents

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|--|-------------------------------|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. 130, AFI Standard |
| | | | | | Principal to have minimum 5 years in formulating, manufacturing, supply and provision of associated services of additives for Oil & Gas | | |

 Work Category:
 Chemicals

 Process Chemicals
 Additives

 10141012P
 Antifoam

Work Category's Description: To supply and deliver Antifoam

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--|------------|---|-------------------------------|-----------------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Wareneass, Doonyara | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 7 1 Otaniaa. a |
| | | | | | Principal to have minimum 5 years in formulating, manufacturing, supply and provision of associated services of additives for Oil & Gas | | |

Work Category:

Chemicals

Process Chemicals

Additives

10141013P

Conductivity Improver

Work Category's Description: To supply and deliver Conductivity Improver

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|---|-------------------------------|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. 130, Ari Standard |
| | | | | | Principal to have minimum 5 years in formulating, manufacturing, supply and provision of associated services of additives for Oil & Gas | | |

Work Category:

Chemicals

Process Chemicals

Additives

10141014P
Other Additives

Work Category's Description:

To supply and deliver Other Additives excluding Anti - Blocking Agent, Antifoam and Conductivity Improver

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|--|-------------------------------|-----------------------------------|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 130, AFT Standard |
| | | | | | Principal to have minimum 5 years in formulating, manufacturing, supply and provision of associated services of additives for Oil & Gas | | |

Work Category: Chemicals
Process Chemicals

10141100P Antifoulant

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Antifoulant

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|---|-------------------------------|-----------------------------------|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | |
| | | | | | Principal to have minimum 10 years experience in manufacture, supply and provision of associated services and minimum 5 proven track record for the supply of Antifoulant | | | |

Work Category:

Chemicals

Process Chemicals

10141100P

Antifoulant

Work Category's Description: To formulate, manufacture, supply and provision of associated services for Antifoulant

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--|----------------------|-------------------------------|--|---------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Lig. Warenbuce, Deckyara | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 7 1 0.aaa |
| | | | | | | Business License from Local Authority C. Kementerian Perdagangan - Akta Timbang dan Sukat | |

| Work Category: | | Chemicals |
|----------------|----------|-------------------|
| | | Process Chemicals |
| 1 | 0141400P | Blended Chemicals |
| | | |

Work Category's Description: To supply and provision of associated services for Blended Chemicals such as but not limited to H2S Scavenger, Pour Point Depressant and Anti Foam

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|----------------|-------------------------------|------------|--------------------------|-------------------------|--|-----------------|---------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment / Machineries | Company's Experience | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Equipment / macrimenes | Company 3 Experience | Registration | Quanty | | | | |
| | | | | | Principal to have min of 10 years in formulate, manufacture, supply and provision of associated services in Chemicals for Oll & Gas | | | | | | |

Work Category:

Chemicals

Process Chemicals

Boiler Water Chemicals

10141511P

Customized Boiler Treatment Chemical

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Customized Boiler Treatment chemical such as but not limited to Oxygen Scavenger, Neutralizing Amine and Phosphate

.....

Agent

Mode of Operation:

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---------------|------------|--------------------------|----------------|--|-------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | Principal to have minimum 10 years experience in manufacture, supply and provision of associated services and minimum 5 proven track record in the field of boiler water treatment program in Oil & Gas industry | | |

| Work Category: | Chemicals |
|----------------|---------------------------------------|
| | Process Chemicals |
| | Cooling Water Chemicals |
| 10141711P | Customized Cooling Treatment Chemical |
| | |

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Customized Cooling Water Teatment Chemical such as but not limited to Anti Scalant, Biocides and Corrosion Inhibitor

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|-----------------------------------|-----------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Eigi Maronouco, Doonyara | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 7.1 1 0.1.1.1.1.1 | | | | |
| | | | | | Principal to have minimum 10 years experience in manufacture, supply and provision of associated services and minimum 5 proven track record in the field of cooling water treatment program in Oil & Gas industry | | | | | | |

| Vork Category: | Chemicals |
|----------------|-----------------------------------|
| | Process Chemicals |
| | Corrosion Inhibitors and Biocides |
| 10141810P | Integrity Chemical |

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for customized Integrity Chemicals such as but not limited to CI and Biocide

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------|--------------------------|-------------------------------|-----------------------------------|---|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | | | | Business License from Local Authority Sementerian Perdagangan - Akta Timbang dan Sukat | | | | | |

Work Category:

Chemicals
Process Chemicals
Process Media
10142411P
Activated, Carbon, Fibre & Cloth

Work Category's Description:

To supply and deliver Process Media i.e. Activated Carbon, Fibre and Cloth

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--|-------------------------|--|-------------------------------|-----------------------------------|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Eig. Warehouse, Beenyara | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | |
| | | | | | Principal to have minimum 5 years experience in manufacture, supply and provision of associated services and minimum 10 proven track record in the field of Activated Carbon, sand and gravel | | | | | | |

Work Category:

Chemicals
Process Chemicals
Production Chemicals
10142610P
Demulsifiers

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Demulsifiers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|--------------------------------|-------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Standard | | | |
| | | | | | | Business License from | | | | |
| | | | | | | Local Authority 2. Kementerian | | | | |
| | | | | | | Perdagangan - Akta | | | | |
| | | | | | | Timbang dan Sukat | | | | |

Work Category:

Chemicals
Process Chemicals
Production Chemicals
10142611P
Deoiler/Water Clarifier

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Deoiler/Water Clarifier

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|--------------------------------|-------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Standard | | | |
| | | | | | | Business License from | | | | |
| | | | | | | Local Authority 2. Kementerian | | | | |
| | | | | | | Perdagangan - Akta | | | | |
| | | | | | | Timbang dan Sukat | | | | |

Work Category:
Chemicals
Process Chemicals
Production Chemicals
10142612P
Dispersant

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Dispersant

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|--|--------------------------|-------------------------------|-----------------------------------|--|--------------------------|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Otalidard | | |
| | | | | | | Business License from Local Authority | | | |
| | | | | | | Kementerian Perdagangan - Akta Timbang dan Sukat | | | |

Work Category:

Chemicals
Process Chemicals
Production Chemicals
Inhibitors & Biocides

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Inhibitors & Biocides

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|--|--------------------------|-------------------------------|-----------------------------------|--|--------------------------|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Otalidard | | |
| | | | | | | Business License from Local Authority | | | |
| | | | | | | Kementerian Perdagangan - Akta Timbang dan Sukat | | | |

Chemicals Process Chemicals Production Chemicals Other Production Chemicals Work Category: 10142614P

To formulate, manufacture, supply and provision of associated services for Other Production Chemicals excluding Demulsifiers, Deoiler/Water Clarifier, Dispersant, Inhibitors & Biocides, PPD - Pour Point Depressant, Sludge Breakers & Wax Removers Work Category's Description:

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|---|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | | | | Business License from | | | | | |
| | | | | | | Local Authority | | | | | |
| | | | | | | Kementerian | | | | | |
| | | | | | | Perdagangan - Akta | | | | | |
| | | | | | | Timbang dan Sukat | | | | | |

Work Category:

Chemicals
Process Chemicals
Production Chemicals
Production Chemicals
10142615P
PPD - Pour Point Depressant

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for PPD - Pour Point Depressant

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|--|--------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 otalidard | | | | |
| | | | | | | Business License from Local Authority Kementerian Perdagangan - Akta Timbang dan Sukat | | | | | |

Work Category:

Chemicals
Process Chemicals
Production Chemicals
10142616P
Sludge Breakers

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Sludge Breakers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|--------------------------------|--------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 100; Al 1 otalidard | | | |
| | | | | | | Business License from | | | | |
| | | | | | | Local Authority 2. Kementerian | | | | |
| | | | | | | Perdagangan - Akta | | | | |
| | | | | | | Timbang dan Sukat | | | | |

Work Category:

Chemicals
Process Chemicals
Production Chemicals
10142617P

Wax Removers

Work Category's Description:

To formulate, manufacture, supply and provision of associated services for Wax Removers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|--------------------------------|--------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 100; Al 1 otalidard | | | |
| | | | | | | Business License from | | | | |
| | | | | | | Local Authority 2. Kementerian | | | | |
| | | | | | | Perdagangan - Akta | | | | |
| | | | | | | Timbang dan Sukat | | | | |

Work Category:

Chemicals

Process Chemicals

10143200P
Water Injection Chemicals

Work Category's Description:

To supply and deliver Water Injection Chemicals such as but not limited to Polyelectrolyte, Surfactant and Oxygen Scavenger

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|------------|--------------------------|----------------|---|---------------------------------|------------------------|
| Key Personnel | | Facilities | Equipment | | External Body | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | Principal to have min of 10 years in formulate, manufacture, supply and provision of associated services in Integrity Chemicals for Oil & Gas | | |

 Work Category:
 Chemicals

 Process Chemicals

 10142800P
 Sulfiding Agent

Work Category's Description: To supply, deliver and provide associated services for Sulphiding Agents such as but not limited to Dimethyl Disulfide (DMDS)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|--|----------------------|---------------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment | | External Body | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | | Meet minimum 99% purity (Company to attach spec sheet or lab report) | | | | |

Work Category:

Civil, Marine, Infrastructure & Building Maintenance
Civil Consultancy Services
11101300S Project Management - Building, Structural & Civil Works

Work Category's Description: The provision of project management services for Building, Structural & Civil Works

Mode of Operation: Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|----------------------------|-------------------------------|--|--------------------------|-----------------------------------|-----------------------------------|-----------------|--------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Stalldard | | | |
| Lead/Senior Civil Engineer | | 10 years experience in plant engineering | Proper office setup | StaadPro /Prokon or equivalent | | | | | | |
| Civil Engineer | | 5 years experience in plant engineering | | | | | | | | |

| Work Category: | | Civil, Marine, Infrastructure & Building Maintenance |
|------------------------------|---------------------------|--|
| | 11130000S | Grounds Maintenance Services |
| | | |
| Work Category's Description: | The provision of manpower | , materials, equipment, services and facilities for landscaping including but not limited to tree planting, turfing, hardscape & maintenance, grass cutting, |
| | lawn mowing and regrading | a earth drains, clearing of access route such as Right of Way (ROW) including but not limited to clearing of bushes, shrubs and trimming of trees branches |

Mode of Operation: Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|---------------------------------------|---------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 711 1 0 tandara | | | |
| | | | | | | CIDB B09 or CE14; Grade G1 & above | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Offshore Site Preparation Work Category:

11141100S

The provision of manpower, materials, equipment, services and facilities for Offshore Site Preparation such as but not limited to underwater debris removal, seabed leveling and stomping Work Category's Description:

Agent Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-----------------|---|---|-----------------------------------|--|-------------------------------|-----------------|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | , , | • | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| Project Manager | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup | *Principal to provide all necessary tools | | | | | | |
| Field Engineer | Degree in any Engineering field | Minimum 3 years experience in marine operation field and trained by Principal | | | | | | | | |
| Site supervisor | N/A | Minimum 5 years experience in marine operation field | | | | | | | | |

Work Category:

Civil, Marine, Infrastructure & Building Maintenance
Geotechnical Services

11141100S Offshore Site Preparation

Work Category's Description: The provision of labour, materials, equipment, services and facilities for offshore site preparation including underwater debris removal, seabed leveling, stomping, etc.

Mode of Operation: Self-operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-----------------|---------------------------------|--|----------------------|--|-----------------------------------|-----------------|-------------------------|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | , , | • | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard |
| , , | field Or Diploma in any | | | Owned/rented relevant facilities for offshore site preparation | | | |
| Field Engineer | Degree in any Engineering field | Minimum 8 years experience in marine operation field | | | | | |
| Site supervisor | N/A | Minimum 5 years experience in marine operation field | | | | | |

| Work Category: | Civil, Marine | Infrastructure & Building Maintenance |
|----------------|---------------|---------------------------------------|
| | Marine Syste | ms |
| 11151000 | Jetty | |
| | | |

Work Category's Description:

To supply and deliver marine systems/products related to jetty such as but not limited to mooring system (e.g. quick release hook, etc.), fendering system (e.g. single mooring point, jetty, boat landing for offshore platform, etc.), and product system (e.g. loading arm, cargo/transfer hoses, etc.)

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|--------------------------|----------------------|---|-----------------------------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | E.g. ISO, AFI Standard |
| | | | | | Principal to have minimum 5 years proven track records of related jetty system supply and manufacturing | | |

Civil, Marine, Infrastructure & Building Maintenance Marine Systems Repairs & Services Single Buoy Mooring (SBMs) System Work Category:

11161100S

The provision of manpower, diver, materials, consumables and equipments necessary for inspection, troubleshooting, repair, maintenance, change out and overhaul of Single Buoy Mooring (SBMs) System Work Category's Description:

Mode of Operation: Self-operated

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------------------------|--|--|---|---------------------------|-------------------------------|-----------------------------------|-------------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 100i3 | | E.g. CIDB, DOSH | 2.g. 100, 7.1. 1 0.1.11.1.1.1 | |
| | Mechanical EngineeringDiploma in Marine / Mechanical Engineering | 3 years experience in SBMs maintenance 3 years experience in SBMs maintenance | Proper office & operational workshop in Malaysia | Access to diving services | | | | |
| Supervisor | Mechanical Engineering Or Certificate in engineering | 3 years experience in SBMs maintenance Or 5 years experience in SBMs maintenance | | | | | | |

Work Category:

Civil, Marine, Infrastructure & Building Maintenance
Civil Consultancy Services

11101000S Building Architectural Design Services

Work Category's Description: The provision of manpower, services and project management for Building Architectural Design Services and installation works

Mode of Operation: Self-operated

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|--|----------------------|-------------------------------|---|---------------------------|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | 2.g. 100, 711 1 0 tandara | | |
| | | | | | | Firm must be registered with "Lembaga Arkitek Malaysia (LAM)" | | | |

Civil, Marine, Infrastructure & Building Maintenance Civil Works & Maintenance Building & Structure Construction Work Category: 11111000S

The provision of manpower, materials, equipment, services and facilities necessary for Building & Structure Construction such as but not limited to construction of offices, warehouses and laboratories Work Category's Description:

Self-operated Mode of Operation:

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|-------------------------------------|-------------------------|----------------------|---|-----------------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyard | 2.g. 100i3 | | E.g. CIDB, DOSH | Ligi ico, 7 i otalidard | | |
| | | | | | | CIDB 801/B02/ B04/CE24; Grade G3 & above | | | |

Work Category:

Civil, Marine, Infrastructure & Building Maintenance
Civil Works & Maintenance
11111100S

Drainage & Sewerage Construction & Maintenance

Work Category's Description:

The provision of manpower, materials, equipment, services and facilities for Drainage & Sewerage Construction & Maintenance such as but not limited to monsoon drain and culvert, and also sewerage facilities including sewer pipes, treatment plant and pump house

Mode of Operation: Self-operated

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|------------|--|------------|----------------------|---|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. Walellouse, Dockyalu | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | |
| | | | | | | CIDB B27/CE19/CE38; Grade G3 & above Suruhanjaya Perkhidmatan Air Negara (SPAN) Permit C or D (except Sabah & Sarawak companies) | | | | |

Civil, Marine, Infrastructure & Building Maintenance Civil Works & Maintenance Onshore Marine Structure Construction & Maintenance Work Category:

11111200S

The provision of manpower, materials, equipment, services and facilities for Onshore Marine Structure Construction & Maintenance such as but not limited to jetties, ports, wharves, harbours, breakwater and river walls Work Category's Description:

Mode of Operation: Self-operated

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|--|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | z.g. marenease, zeekyara | 2.g. 100.0 | | E.g. CIDB, DOSH | g , Otalida u | | |
| | | | | | | CIDB CE03; Grade G3 & above | | | |

Civil, Marine, Infrastructure & Building Maintenance Civil Works & Maintenance Railway Tracks Construction & Maintenance Work Category:

11111300S

Work Category's Description: The provision of manpower, materials, equipment, services and facilities for Railway Tracks Construction & Maintenance and installation works

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|--------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockvard E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 7.1 Totalidard | | | | | |
| | | | | | | CIDB CE07; Grade G1 & above | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Civil Works & Maintenance Road & Pavement Construction & Maintenance Work Category:

11111400S

Work Category's Description: The provision of labour, materials, equipment, services and facilities for Road & Pavement Construction & Maintenance such as but not limited to open carpark

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|-----------------------------------|--------------------------|--|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | L.g. Warenouse, Dockyaru | 2.9. 100.0 | | E.g. CIDB, DOSH | Lig. 100, 7th Totalidard | | | | | |
| | | | | | | CIDB CE01; Grade G3 & above | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Land Survey Work Category:

11141000S

Work Category's Description: The provision of manpower, materials, equipment, services and facilities for Land Survey such as but not limited to underground utilities scanning and mapping

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|--|----------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | 2.9. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 7.1 1 0 tanuar a | | | | | |
| | | | | | | Land Surveyor must be registered with "Board of Land Surveyor" | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Onshore Site Preparation Work Category:

11141200S

The provision of manpower, materials, equipment, services and facilities for Onshore Site Preparation such as but not limited to installation of temporary facilities, site clearing, earthworks and levelling Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|---------------------------|----------------------|-------------------------------|-----------------------------------|--------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. wateriouse, Dockyaru | L.g. 100i3 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Stalldard | | | | |
| | | | | | | CIDB CE21; Grade G3 & above | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Onshore Soil Investigation Work Category:

11141300S

The provision of manpower, equipment & services for Onshore Soil Investigation (Wellsite, Onshore Facilities and Pipeline (Onshore) site investigation) including but not limited to marine condition (coastal and river) Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------------|--------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | 2.g. 100.0 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | | |
| | | | | | | CIDB CE21; Grade G3 & | | | | | | |
| | | | | | | above | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Other Foundation Works Work Category:

The provision of labour, materials, equipment, services and facilities for installation of Other Foundation Works (excluding piling) such as but not limited to pad footing, strip footing and raft foundation Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO. API Standard | | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 100.0 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | | |
| | | | | | | CIDB B04 or CE21; Grade | | | | | | |
| | | | | | | G3 & above | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Piling Work Category:

11141500S

Work Category's Description: The provision of labour, materials, equipment, services and facilities for installation of all types of Piling

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|--------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO. API Standard | | | | | | |
| Designation | Qualification | Experience | Eig. Marchedoc, Doonyard | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100,711 / Ottandard | | | | | |
| | | | | | | CIDB B05 or CE10; Grade | | | | | | |
| | | | | | | G3 & above | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Reclaimation & Dredging Works Work Category:

The provision of manpower, materials, equipment, services and facilities for Reclaimation & Dredging Works Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO. API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 150, AFT Standard | | | | | |
| | | | | | | CIDB CE06 or CE18; Grade | | | | | | |
| | | | | | | G3 & above | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Geotechnical Services Slope Protection Work Category:

11141700S

The provision of manpower, materials, equipment, services and facilities for installation of specialised Slope Protection works such as but not limited to soil nailing, earth reinforcement and tension angle Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | | |
| | | | | | | CIDB CE08 or CE21; Grade | | | | | | |
| | | | | | | G3 & above | | | | | | |

Work Category:

Civil, Marine, Infrastructure & Building Maintenance
Geotechnical Services

11141800S Valuer

Work Category's Description: The provision of manpower, materials, equipment, services and facilities necessary for accurate estimation on current market properties value

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|--|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | L.g. Warenouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | | |
| | | | | | | Firm must registered with "Board of Valuers, Appraisers and Estate Agents Malaysia" | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Upgrading/Renovation & Repair Works Concrete Repairs & Strengthening Work Category:

11191000S

The supply of manpower, materials, services and facilities for Concrete Repairs & Strengthening (reinforcement of structures) such as but not limited to pressure grouting and guniting Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|---------------------------------------|----|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | z.g. maronouco, zookyara | 3 | | E.g. CIDB, DOSH | 3, | | | | | |
| | | | | | | CIDB B06 or CE11; Grade G1 & above | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Upgrading/Renovation & Repair Works Fencing Work Category:

11191100S

Work Category's Description: The provision of manpower, materials, equipment, services and facilities for construction, installation and maintenance of Fencing

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|---------------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | | | | CIDB B04 or CE21; Grade G3 & above | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Upgrading/Renovation & Repair Works General Structural/Building Painting Work Category:

11191200S

Work Category's Description: The supply of manpower, materials, services and facilities for internal and external painting/repainting of buildings and general structures

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO. API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | | | | CIDB B14; Grade G1 & | | | | | |
| | | | | | | above | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Upgrading/Renovation & Repair Works Interior Decoration/Renovation Work Category:

11191300S

The provision of manpower, materials, equipment, services and facilities for Interior Decoration/Renovation of buildings such as but not limited to ceiling panels, partitions, built in fitments and raised floor works

Mode of Operation: Self-operated

Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|-------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. 100, Al Totalidard | | | | |
| | | | | | | CIDB B07; Grade G1 & above | | | | | |
| | | | | | | above | | | | | |

| Work Category: | Civil, Marine, Infrastructure & Building Maintenance |
|----------------|--|
| | Upgrading/Renovation & Repair Works |
| 11191500S | Plumbing |
| | |

Work Category's Description: The supply of manpower, materials, services and facilities for installation, repairs and servicing of water pipes, sanitary works and plumbing fixture

| | | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|---------------|-------------------------------|--------------------------|------------|----------------------|---|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | | |
| | | | | | | CiDB B10; Grade G1 & above Survhanjaya Perkhidmatan Air Negara (SPAN) Permit A for plumber (for Semenanjung Malaysia company) or Plumber and Pipe Fitter's certificate from Local Authority (for Sabah & Sarawak company) | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Upgrading/Renovation & Repair Works Roofing Work Category:

11191600S

Work Category's Description: The supply of manpower, materials, services and facilities for roof installation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | | | | CIDB B15; Grade G1 & above | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Upgrading/Renovation & Repair Works Water Proofing Work Category:

11191700S

Work Category's Description: The supply of manpower, materials, services and facilities of for waterproofing of building basement, roofs, floor, and wall and concrete tank

Mode of Operation:

| | | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|---------------|---------------|--|--------------------------|-------------------------------|-----------------------------------|----------------------------|-------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| | Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard |
| | | | | | | | CIDB B08; Grade G1 & above | |
| _ | | | | | | | | |

Civil, Marine, Infrastructure & Building Maintenance Upgrading/Renovation & Repair Works Water Reticulation Works Work Category: 11191800S

The provision of manpower, materials, equipment, services and facilities for construction/maintenance of water supply facilities such as but not limited to piping works, treatment plant and pump house Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|--|---------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFT Statitual u | | | | |
| | | | | | | CIDB B27/CE20/CE39; Grade G3 & above Suruhanjaya Perkhidmatan Air Negara (SPAN) Permit C or D (except Sabah & Sarawak companies) | | | | | |

Digital & ICT
Telecommunication Equipment & Services
Network Design, Configuration & Installation and Maintenance for Secured Voice & Data Communication and Facilities 13171900S

The provision of labor, materials, consumables, equipment and facilities necessary for repair, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of secured voice and data communication network Work Category's Description:

Mode of Operation:

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|------------------------------------|--|---|-----------------------------------|---|----------------------------|-----------------------------------|----------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | • | | E.g. CIDB, DOSH | 3 - 1, - 1 - 1 |
| Project /Field Service Engineer | Degree in any Engineering field | | Manned and permanent office setup | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| Technician | Certificate in relevant Engineering field | Minimum 5 years experience in Network Design, Configuration & Installation And Maintenance For Secured Voice & Data Communication | | | | | |

Work Category: Digital & ICT
Telecommunication Equipment & Services
Telecommunication System Leased Services 13172700S

The provision of labour, materials, consumables, equipment and facilities necessary for design, repair, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Telecommunication System Leased Services (e.g. VSAT, DTRS, etc.) Work Category's Description:

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|------------------------------------|--|---|-----------------------------------|---|--|-----------------------------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | 2.9. 100.0 | | E.g. CIDB, DOSH | L.g. 130, Ari Standard |
| Project /Field Service Engineer | Degree in any Engineering field | Minimum 3 years experience in Telecommunication System Leased Services | Manned and permanent office setup | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| Technician | Certificate in relevant Engineering field | Minimum 5 years experience in Telecommunication System Leased Services | | | | | |

Digital & ICT Application Software Mainframe Software Work Category: 13101100P

Work Category's Description: To supply, deliver, install, test and commission of Mainframe Software specifically Z series which is the standard operation for mainframes

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--------------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|--------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | Ligi 100, 7.1 Totalida d | | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | | |

Work Category: Digital & ICT Application Software Office Software Application

13101200P

To supply, deliver, install, test and commission of Office Software Application such as but not limited to system software (e.g. Microsoft Windows, Mac OS X and etc.), programming software (e.g. PHP, Perl,C++ and etc.) and application software (e.g. accounting software, graphic software and etc.) Work Category's Description:

Mode of Operation: Dealer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--------------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Olandard | | | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | | | |

Digital & ICT Application Software Server Software Work Category:

13101300P

Work Category's Description: To supply, deliver, install, test and commission of Server Software specifically those that are compatible with RISC based platform and Intel based platform

Mode of Operation: Dealer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--------------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | | | |

Digital & ICT
Application Software
Software for Workstations Work Category: 13101500P

To supply, deliver, install, test and commission of Software for Workstations such as but not limited to linux, unix, technical application, scientific application and Autodesk Suite Work Category's Description:

Dealer Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|--------------------|--------------------------------------|-----|--------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| Key Personnel | | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otalidara | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | |

Digital & ICT Building Automation Smart Card & Related Services 13111300S

Work Category's Description: The provision of support for warranty and maintenance of Smart Card & Related Services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|--------------------|--------------------------------------|-----|-------------------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | |

Work Category: Digital & ICT

Digital & ICT
Data Management Services
Backup & Restore Services

13121000S Backup & Restore Ser

Work Category's Description: The provision of support for warranty and maintenance of Backup & Restore Services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------|--------------------------------------|-----|--|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otalidard | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | |

Digital & ICT
Data Management Services
Computer Storage

13121100S

Work Category's Description: The provision of support for warranty and maintenance of Computer Storage such as but not limited to tape library and peripherals

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------|--------------------------------------|-----|--------------------------|-------------------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| | Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designa | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | |
| 1 ICT/EE p | ersonnel | N/A | N/A | | | | | | | |

Digital & ICT
Data Management Services
Disaster Recovery Subscription Services 13121200S

The provision of support for warranty and maintenance of Disaster Recovery Subscription Services which is a continuation of technology infrastructure critical to ensure business continuity in the midst/after disruptive events Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------|--------------------------------------|-----|--|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | |

Digital & ICT Data Management Services Storage & Retrieval of Backup Media

13121400S

The provision of support for warranty and maintenance of Storage & Retrieval of Backup Media including but not limited to magnetic storage media (e.g. hard disk, magnetic tape and etc.) and optical storage media (e.g. CD, DVD and etc.) Work Category's Description:

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|----------------|--------------------------------------|-----|--|-------------------------|----------------------|-------------------------------|-----------------------------------|
| | Key Personne | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designatio | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Standard |
| 1 ICT/EE perso | nnel N/A | N/A | | | | | |

Digital & ICT ICT Consultancy Services ICT Consultancy

13141100S

Work Category's Description: The provision of manpower, services and project management for ICT consultancy

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------|--------------------------------------|-----|--------------------------|-------------------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| | Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designa | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | |
| 1 ICT/EE p | ersonnel | N/A | N/A | | | | | | | |

Work Category: Digital & ICT

Digital & ICT
ICT Consultancy Services
13141100S ICT Consultancy

Work Category's Description: The provision of manpower, services and project management for ICT consultancy

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------|--------------------------------------|-----|--------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Designation Qualification Experience | | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | Lig. 100, Ai i otanuaru | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | |

Work Category: Digital & ICT

Digital & ICT
ICT Consultancy Services
13141200S ICT Training Services

Work Category's Description: The provision of manpower, materials, equipment, services and facilities for ICT Training Services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------|--------------------------------------|-----|--------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Designation Qualification Experience | | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | Lig. 100, Ai i otanuaru | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | |

Digital & ICT ICT Equipment & Hardware Accessories/Printers/Plotters/Peripherals 13151000P

Work Category's Description:

To supply, deliver, install, test and commission of Accessories/Printers/Piotters/Peipherals that is connected to a computer either directly or via network include but not limited to mouse, keyboard, hard drive, expansion cards, graphics cards, printers, scanners, microphones, loudspeakers, webcams and plotters

Mode of Operation: Dealer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------|--------------------------------------|-----|-------------------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otalidard | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | |

Work Category: Digital & ICT ICT Equipment & Hardware Data Storage Media

13151200P

To supply, deliver, install, test and commission of Data Storage Media devices which consist of primary storage, secondary storage, tertiary storage and offline storage, e.g. thumb drive, CD, DVD, CD / DVD writer, external hard disk, backup storage and etc., generally and High-End Enterprise Array (SAN), Mid-Range Enterprise Array (SAN), Network Attached Storage (NAS), Direct Attached Storage (DAS) and Tape Library

Mode of Operation: Dealer

Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--------------------|--------------------------------------|-----|--|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | | |

Digital & ICT ICT Equipment & Hardware Hardware for Workstations 13151400P

Work Category's Description:

To supply, deliver, install, test and commission of Hardware for Workstations inluding but not limited to high-end computer specifically designed for technical or scientific applications

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|--------------------|--------------------------------------|-----|-------------------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Designation Qualification Experience | | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | |

Work Category: Digital & ICT

Digital & ICT ICT Equipment & Hardware Mainframe

13151500P Mainfram

Work Category's Description:

To supply, deliver, develop, install, test and commission of ICT system hardware's based on high end computing

Mode of Operation: Dealer

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------------------------|---------------|------------|--|-------------------------|----------------------|-----------------|-----------------------------------|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Lig. Tra. C. Case, Dockyard | 2.9. 10013 | | E.g. CIDB, DOSH | 2.g. 100, 7.1 1 Otanuaru |
| 1 ICT/EE personnel | N/A | N/A | | | | | |

Work Category:

Digital & ICT ICT Equipment & Hardware Personal Computer

13151700P

To supply, deliver, install, test and commission of personal computers which is intended to be used by individuals such as but not limited to desktop, laptop, netbook and tablet

Mode of Operation: Dealer

Work Category's Description:

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|--|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Standard | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | |

Work Category: Digital & ICT ICT Equipment & Hardware Server

13151900P

To supply, deliver, develop, install, test and commission of server dedicated to run one or more services to server the needs of the users of other computers on the network such as database server, file server, mail server, print server, web server and etc., generally and Reduced Instruction Set Computing (RISC) based platform server and Intel based platform server specifically Work Category's Description:

Mode of Operation: Dealer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------|-------------------------------|------------|--|-------------------------|----------------------|-----------------|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | E.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | | |

Work Category:

Digital & ICT
Telecommunication Equipment & Services
Hardware Support Services

13171300S

Work Category's Description: The provision of manpower, materials, equipment, services and facilities for Hardware Support Services (e.g. installation, repair, maintenance, troubleshoot, migration, etc.)

Mode of Operation: Self-operated

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|--|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | L.g. Walellouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al I Standard | | |
| 1 ICT/EE personnel | N/A | N/A | | | | | | | |

Work Category:

13171800S

Work Category's Description:

Digital & ICT
Telecommunication Equipment & Services
Network Design, Configuration & Installation and Maintenance for ICT Voice & Data Communication and Facilities The provision of labor, materials, consumables, equipment and facilities necessary for repair, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of ICT voice and data communication network

Mode of Operation: Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 olandard | | | | |
| | | | | | | CIDB - category E | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Electrical Bulks |
| 14101700P | Subsea Cable |

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Subsea Cable and conduct training on operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|-------------------------------------|--------------------------|----------------------|---|-----------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 100is | | L.g. CIDB, DOSIT | L.g. 150, Art Standard | | | |
| | | | | | Principal to have minimum 10 years experience in subsea cable manufacturing | | | | | |

Work Category: Electrical Equipment & Services
Electrical Bulks
14101700P Subsea Cable

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Subsea Cable and conduct training on operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------|--|--|---|---|----------------------|---|-----------------------------------|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in subsea cable production | Manned and permanent office setup Assembling facility Testing facility Access to cable laying barge | Insulation Resistance Tester Clamp Meter AC/DC Current Probe Fault Cable Locater Electrical High Pressure | | Business License from Local Authority | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | 4. Access to Caute taying the ge | Tester Tester | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in subsea cable installation, commission and troubleshoot. Trained and certified by Principal | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience in subsea cable design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Work Category: Electrical Equipment & Services
Electrical Bulks
14101700P Subsea Cable

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Subsea Cable and conduct training on operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|---|--|---|---|----------------------|---|-----------------------------------|--|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in subsea cable production | Manned and permanent office setup Assembling facility Testing facility R&D facility | Insulation Resistance Tester Clamp Meter AC/DC Current Probe Fault Cable Locater Electrical High Pressure | | Business License from Local Authority | | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 5 years experience in project management | | Tester | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in subsea cable installation, commission and troubleshoot. | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in subsea cable design | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in subsea cable design | | | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Generators & Transformers |
| 14151000P | Cast Resin Dry Type |
| | |

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of cast resin dry type transformers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|---|--|------------------|------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 100is | | L.g. CIDB, DOSII | L.g. 150, Art Standard | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of cast resin dry type transformer | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers

14151000P Cast Resin Dry Type

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of cast resin dry type transformers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|---|---|--|---|----------------------|---|-----------------------------------|--|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience cast resin dry type transformer production | 3. Testing facility | Multi Tester Insulation Resistance Tester Clamp Meter A AC/DC Current Probe Voltage Regulator Transformer turn ratio test set | | Business License from Local Authority | | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | o. I ransformer turn ratio test set | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in cast resin dry type transformer installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience cast resin dry type transformer design | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers

14151000P Cast Resin Dry Type

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of cast resin dry type transformers

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------|---|---|--|---|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in cast resin dry type transformer production | Manned and permanent office setup Assembling facility Testing facility R&D facility | Multi Tester Insulation Resistance Tester Clamp Meter AC/DC Current Probe Voltage Regulator Transformer turn ratio test set | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 5 years experience in project management | | 6. Haristonner um rano test ser | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in cast resin dry type transformer installation, commission and troubleshoot | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in cast resin dry type transformer design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | | Minimum 5 years experience in cast resin dry type transformer design | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---|
| | Generators & Transformers |
| 14151100P | Closed Cycle Vapour Turbogenerator (CCVT) |
| | |

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Closed Cycle Vapour Turbogenerator (CCVT)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|--|---|-------------------------|----------------------|---|-----------------------------------|
| | Key Personnel | | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | | | | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of CCVT | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---|
| | Generators & Transformers |
| 14151100P | Closed Cycle Vapour Turbogenerator (CCVT) |

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Closed Cycle Vapour Turbogenerator (CCVT)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|------------------------|----------------------------------|---|---|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience CCVT production | Manned and permanent office setup Assembling facility | Insulation Resistance Tester Clamp Meter | | Business License from Local Authority | |
| Project Coordinator | | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | 3. Testing facility | Vibration Meter S. AC/DC Current Probe Tachometer Temperature Measurement Device | | | |
| Field Service Engineer | | Minimum 5 years experience in CCVT installation, commission and troubleshoot. Trained and certified by Principal | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience CCVT design | | | | | |
| QA/QC Engineer | | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---|
| | Generators & Transformers |
| 14151100P | Closed Cycle Vapour Turbogenerator (CCVT) |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Closed Cycle Vapour Turbogenerator (CCVT)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|------------------------|---|--|--|--|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | · | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in CCVT production | Manned and permanent office setup Assembling facility | Insulation Resistance Tester Clamp Meter | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or | Testing facility R&D facility | | | | |
| | | Minimum 5 years experience in project management | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in CCVT installation, commission and troubleshoot | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in CCVT design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in CCVT design | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Generators & Transformers |
| 14151200P | Diesel Engine Driven Generator |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Diesel Engine Driven Generator

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------------------------|---------------|------------|--------------------------|----------------------|---|-----------------|------------------------|
| | Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 100is | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of diesel engine driven generator | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Generators & Transformers |
| 14151200P | Diesel Engine Driven Generator |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Diesel Engine Driven Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|------------------------|---|---|--|--|----------------------|---|-----------------------------------|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience diesel engine driven generator production | Assembling facility Testing facility | Insulation Resistance Tester Clamp Meter Vibration Meter AC/DC Current Probe | | Business License from Local Authority | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | 6. Tachometer 7. Temperature Measurement Device | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | diesel engine driven generator installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience diesel engine driven generator design | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers

14151200P Diesel Engine Driven Generator

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Diesel Engine Driven Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|------------------------|---|--|--|---|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in diesel engine driven generator production | setup 2. Assembling facility 3. Testing facility 4. R&D facility | Multi Tester Insulation Resistance Tester Clamp Meter With a control of the con | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | Tamperature Measurement Device | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in diesel engine driven generator installation, commission and troubleshoot | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in diesel engine driven generator design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in diesel engine driven generator design | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Generators & Transformers |
| 14151300P | Gas Engine Driven Generator |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Gas Engine Driven Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|-------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 100is | | 2.g. 0.02, 00011 | Lig. 100, Al Totalida d | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of gas engine driven generator | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers
14151300P Gas Engine Driven Generator

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Gas Engine Driven Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|---|---|---|--|----------------------|---|-----------------------------------|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | _ | | | 3 11, | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience gas engine driven generator production | Manned and permanent office setup Assembling facility Testing facility | Multi Tester Insulation Resistance Tester Clamp Meter Vibration Meter AC/DC Current Probe Tachometer | | Business License from Local Authority | | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | Temperature Measurement Device | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in gas engine driven generator installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience gas engine driven generator design | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers

14151300P Gas Engine Driven Generator

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Gas Engine Driven Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|--|---|---|--|----------------------|---|-----------------------------------|--|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in gas engine driven generator production | Manned and permanent office setup Assembling facility Testing facility R&D facility | Multi Tester Insulation Resistance Tester Clamp Meter With a control of the con | | Business License from Local Authority | | | | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | 6. Facilitation of the control of th | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in gas engine driven generator installation, commission and troubleshoot | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in gas engine driven generator design | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in gas engine driven generator design | | | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Generators & Transformers |
| 14151400P | Micro Turbine Generator |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Micro Turbine Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------------|-------------------------|--|---|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | L.g. Tools | | L.g. CIDB, DOSH | E.g. 150, AFI Stalldard | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of micro turbine generator | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers
14151400P Micro Turbine Generator

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Micro Turbine Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|---|---|---|---|----------------------|---|-----------------------------------|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | | | | | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience micro turbine generator production | Manned and permanent office setup Assembling facility Testing facility | Insulation Resistance Tester Clamp Meter Vibration Meter | | Business License from Local Authority | | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | S. AC/DC Current Probe S. Tachometer Temperature Measurement Device | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in micro turbine generator installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience micro turbine generator design | | | | | | | | |
| QA/QC Engineer | | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers
14151400P Micro Turbine Generator

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Micro Turbine Generator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|--|---|--|---|----------------------|---|-----------------------------------|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | | - | | - | <u> </u> | | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in micro turbine generator production | Manned and permanent office setup Assembling facility Testing facility R&D facility | Multi Tester Insulation Resistance Tester Clamp Meter Vibration Meter AC/DC Current Probe | | Business License from Local Authority | | | | | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | 4. K&D ISCIIIY | 5. ACIDE Current Probe 6. Tachometer 7. Temperature Measurement Device | | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in micro turbine generator installation, commission and troubleshoot | | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in micro turbine generator design | | | | | | | | | |
| QA/QC Engineer | | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in micro turbine generator design | | | | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Generators & Transformers |
| 14151500P | Oil Immersion Type |

Work Category's Description: To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Oil Immersion Type Transformers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | |
| | | | | | Principal to have minimum 3 years experience in engineering (shop drawing) and assembly of oil immersion type transformer | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers

14151500P Oil Immersion Type

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Oil Immersion Type Transformers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|---|---|---|---|----------------------|---|-----------------------------------|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | | - | | | | | | | |
| Production Manager | | Minimum 5 years experience oil immersion type transformer production | Manned and permanent office setup Assembling facility Testing facility | Multi Tester Insulation Resistance Tester Clamp Meter AC/DC Current Probe Voltage Regulator Transformer turn ratio test set | | Business License from Local Authority | | | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | O. Haristonie um ratio ess. set | | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | oil immersion type transformer installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience oil immersion type transformer design | | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | | |

Work Category: Electrical Equipment & Services
Generators & Transformers
14151500P Oil Immersion Type

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Oil Immersion Type Transformers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|--|--|---|---|----------------------|---|-----------------------------------|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | | - | | 9 | g , | | | |
| Production Manager | | Minimum 5 years experience in oil immersion type transformer production | Manned and permanent office setup Assembling facility Testing facility R&D facility | Multi Tester Insulation Resistance Tester Clamp Meter AC/DC Current Probe Voltage Regulator Transformer turn ratio test set | | Business License from Local Authority | | | | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 5 years experience in project management | | | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in oil immersion type transformer installation, commission and troubleshoot | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in oil immersion type transformer design | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |
| R&D Engineer | | Minimum 5 years experience in oil immersion type transformer design | | | | | | | | |

Work Category: Electrical Equipment & Services
Power Distribution & Control

14161000P Containerized Substation

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Containerized Substation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 100is | | L.g. CIDB, DOSIT | L.g. 150, Art Standard | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of containerized substation | | | | | |

Work Category: Electrical Equipment & Services
Power Distribution & Control
14161000P Containerized Substation

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Containerized Substation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|------------------------|---|---|--|---|----------------------|---|-----------------------------------|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | - | | 9 | g, | |
| Production Manager | Degree in any Engineering field | production | Assembling facility Testing facility | Multi Tester Insulation Resistance Tester Micro Ohm Meter Clamp Meter AC/DC Current Probe Voltage Regulator | | Business License from Local Authority | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | containerized substation installation, commission and troubleshoot. Trained and certified by Principal | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience containerized substation design | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | |

Work Category: Electrical Equipment & Services
Power Distribution & Control
14161000P Containerized Substation

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Containerized Substation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|------------------------|---|--|--|--|----------------------|---|-----------------------------------|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in containerized substation production | 3. Testing facility | Insulation Resistance Tester Micro Ohm Meter Clamp Meter AC/DC Current Probe | | Business License from Local Authority | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | 6. Voltage Regulator | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in containerized substation installation, commission and troubleshoot | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in containerized substation design | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in containerized substation design | | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|--|
| | Power Distribution & Control |
| 14161600P | Low Voltage Switchboard/Switchgear/MCC/Air Circuit Breaker(ACB)/Busbar |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Low Voltage Switchboard/Switchboard/Switchboard/Switchboard/Switchboard/Switchboard/Switch

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|------------------------|---|--|---|---|----------------------|---|-----------------------------------|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | | | | - | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in LV switchgear production | Manned and permanent office setup Assembling facility Testing facility | Multi Tester Insulation Resistance Tester Micro Ohm Meter Clamp Meter AC/DC Current Probe | | Business License from Local Authority | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | 5. ACID: Current Proce 6. Voltage Regulator | | | | | |
| Field Service Engineer | | LV switchgear installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | LV switchgear design | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---|
| | Power Distribution & Control |
| 14161600P | Low Voltage Switchboard/Switchgear/MCC/Air Circuit Breaker(ACB/Busbar |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of low voltage switchboard/switchgear/MCC/ACB/Busbar/air break contactors

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------------------------|--|--|--|---|----------------------|---|-----------------------------------|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | - | | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in LV switchgear production | Manned and permanent office setup Assembling facility Testing facility R&D facility | Multi Tester Insulation Resistance Tester Micro Ohm Meter Clamp Meter AC/DC Current Probe | | | | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | 4. AGD recitivy | Voltage Regulator | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in LV switchgear installation, commission and troubleshoot | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in LV switchgear design | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in LV switchgear design | | | | | | |

| Work Category: | | Electrical Equipment & Services |
|------------------------------|-----------|---|
| | | Power Distribution & Control |
| | 14161700P | High Voltage Switchboard/Switchgear/Vacuum Circuit Breaker (VCB)/Vacuum Contactor Unit (VCU)/Contactor/Busbar |
| Work Category's Description: | | teliver, install, hook up, test, commission and personnel training of To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of High ar/Vacuum Circuit Breaker (VCB)/Vacuum Contactor Unit (VCU)/Contactor/Busbar |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------------|-------------------------|--|---|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, Ari Standard | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of HV switchgear | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---|
| | Power Distribution & Control |
| 14161700P | High Voltage Switchboard/Switchgear/Vacuum Circuit Breaker (VCB)/Vacuum Contactor Unit (VCU)/Contactor/Busbar |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of high voltage switchboard/switchgear/VCB/VCU/Contactor/Busbar

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|--------------------|---|--|--|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | L.g. Warenouse, Doonyard | L.g. 10015 | | E.g. 0122, 20011 | Lig. 100, Al 1 Olandard |
| Production Manager | Degree in any Engineering field | * ' | Assembling facility Testing facility | Multi Tester Insulation Resistance Tester Micro Ohm Meter Clamp Meter AC/DC Current Probe Voltage Regulator | | Business License from Local Authority | |
| | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | | | | |
| | Degree in Electrical Engineering | HV switchgear installation, commission and troubleshoot. Trained and certified by Principal | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience in HV switchgear design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---|
| | Power Distribution & Control |
| 14161700P | High Voltage Switchboard/Switchgear/Vacuum Circuit Breaker (VCB)/Vacuum Contactor Unit (VCU)/Contactor/Busbar |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of high voltage switchboard/switchgear/VCB/VCU/Contactor/Busbar

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|------------------------|--|---|--|--|----------------------|---|-----------------------------------|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in | Manned and permanent office setup Assembling facility Testing facility | Insulation Resistance Tester Micro Ohm Meter Clamp Meter | | Business License from Local Authority | | | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 3 years experience in project management. Or Minimum 5 years experience in project management | 4. R&D facility | 5. AC/DC Current Probe 6. Voltage Regulator | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in HV switchgear installation, commission and troubleshoot | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in HV switchgear design | | | | | | | |
| QA/QC Engineer | | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in HV switchgear design | | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|--|
| | Power Distribution & Control |
| 14162000P | Telecontrol & Substation Automation System |
| | |

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Telecontrol & Substation Automation System

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------------------------|---------------|-------------------------------------|--------------------------|----------------------|--|-----------------------------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyaru | L.g. 100is | | L.g. CIDB, DOSI1 | L.g. 150, Art Standard |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of telecontrol & substation automation system | | |

Work Category: Electrical Equipment & Services
Power Distribution & Control
1416200P Telecontrol & Substation Automation System

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Telecontrol & Substation Automation System

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|---|---|---|---|---|---|--|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience telecontrol & substation automation system system production | Manned and permanent office setup Assembling facility Testing facility | Multi Tester Scope Meter Insulation Resistance Tester Clamp Meter AC/DC Current Probe Voltage Regulator | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in telecontrol & substation automation system installation, commission and troubleshoot. Trained and certified by Principal | | | | | |
| Design Engineer | Degree in Electrical Engineering | telecontrol & substation automation system system design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Work Category: Electrical Equipment & Services
Power Distribution & Control
14162000P Telecontrol & Substation Automation System

Work Category's Description:

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Telecontrol & Substation Automation System

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|---|---|--|--|---|---|--|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in telecontrol & substation automation system system production | setup 2. Assembling facility 3. Testing facility 4. R&D facility | Multi Tester Scope Meter Insulation Resistance Tester Clamp Meter AC/DC Current Probe Voltage Regulator | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | project management Or | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in telecontrol & substation automation system system installation, commission and troubleshoot | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in telecontrol & substation automation system system transformer design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in telecontrol & substation automation system system design | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|--|
| | Power Distribution & Control |
| 14162100P | Variable Speed Drives and Soft Starter |

Work Category's Description:

To design, supply, deliver, install, hook up, test, commission and personnel training of Variable Speed Drives and Soft Starter System

Mode of Operation: Agent

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------------------|---------------|--|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, Ari Standard | | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of VSD and soft starter system | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|--|
| | Power Distribution & Control |
| 14162100P | Variable Speed Drives and Soft Starter |

Work Category's Description: To design, supply, deliver, install, hook up, test, commission and personnel training of Variable Speed Drives and Soft Starter System

Mode of Operation: Assembler

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|--|---|---|---|----------------------|---|-----------------------------------|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | | | | - | 3 11,7 11 11 11 | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience VSD and soft starter system production | Manned and permanent office setup Assembling facility Testing facility | Multi Tester Scope Meter Insulation Resistance Tester Clamp Meter AC/DC Current Probe | | Business License from Local Authority | | | |
| Project Coordinator | Degree in any Engineering field Minimum 3 years experience in project management Or Or | | Voltage Regulator | | | | | | |
| | Diploma in any Engineering field | Minimum 5 years experience in project management | | | | | | | |
| | | | | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in VSD and soft starter system installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience VSD and soft starter system design | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | |

Work Category: Electrical Equipment & Services
Power Distribution & Control

14162100P Variable Speed Drives and Soft Starter

Work Category's Description: To design, supply, deliver, install, hook up, test, commission and personnel training of VSD & Soft Starter System

Mode of Operation: Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------|---|---|---|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | | | | 3 11, 11111 |
| Production Manager | | Minimum 5 years experience in VSD and soft starter system production | Manned and permanent office setup Assembling facility Testing facility R&D facility | Multi Tester Scope Meter Insulation Resistance Tester Clamp Meter AC/DC Current Probe | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or | | 6. Voltage Regulator | | | |
| | | Minimum 5 years experience in project management | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in VSD and soft starter system installation, commission and troubleshoot | | | | | |
| Design Engineer | Degree in Electrical Engineering | VSD and soft starter system transformer design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in VSD and soft starter system design | | | | | |

| Work Category: | | Electrical Equipment & Services |
|----------------|-----------|---------------------------------|
| | | Power Supply System |
| | 14181300P | Industrial UPS - Static Type |
| | | |

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Industrial UPS - Static Type and conduct training on operation

Mode of Operation: Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | E.g. 100is | | L.g. CIDB, DOSI1 | L.g. 150, Art Standard | | | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of UPS | | | | | | | |

Work Category: Electrical Equipment & Services
Power Supply System

14181300P Industrial UPS - Static Type

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Industrial UPS - Static Type and conduct training on operation

Mode of Operation: Assembler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|---|--|---|--|----------------------|---|-----------------------------------|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in UPS production | Manned and permanent office setup Assembling facility Testing facility | Scope Meter Insulation Resistance Tester Clamp Meter AC/DC Current Probe | | Business License from Local Authority | | | | |
| Project Coordinator | | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | Voltage Regulator T. Load Bank Manufacturing Software for Configuration & Diagnostic | | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | UPS installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | UPS design | | | | | | | | |
| QA/QC Engineer | | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |

Work Category: Electrical Equipment & Services
Power Supply System

14181300P Industrial UPS - Static Type

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Industrial UPS - Static Type and conduct training on operation

Mode of Operation: Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|------------------------|---|--|--|--|----------------------|---|-----------------------------------|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in | Manned and permanent office setup Manufacturing facility | Scope Meter Insulation Resistance Tester | | Business License from Local Authority | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | 3. Testing facility 4. R&D facility | 4. Clamp Meter 5. AC/DC Current Probe 6. Voltage Regulator 7. Load Bank 8. Manufacturing Software for Configuration & Diagnostic | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in UPS installation, commission and troubleshoot | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in UPS design | | | | | ı | | |
| QA/QC Engineer | | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in UPS design | | | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Power Supply System |
| 14181600P | Solar Power Supply |
| | |

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Solar Power Supply and conduct training on operation

Mode of Operation: Agent

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------------------|---------------|--|--------------------------|----------------------|---|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Statidard | | | | |
| | | | | | Principal to have minimum 5 years experience in design, engineering and assembly of Solar Power Supply | | | | | | |

Work Category: Electrical Equipment & Services
Power Supply System

14181600P Solar Power Supply

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Solar Power Supply and conduct training on operation

Mode of Operation: Assembler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|------------------------|--|---|--|---|----------------------|---|-----------------------------------|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in Solar Power Supply production | setup 2. Assembling facility 3. Testing facility | Multi Tester Scope Meter Scope Meter Insulation Resistance Tester Clamp Meter AC/DC Current Probe Voltage Regulator Load Bank | | Business License from Local Authority | | | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 5 years experience in project management | | 7. Lisa Batik. S. Manufacturing Software for Configuration & Diagnostic | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Solar Power Supply installation, commission and troubleshoot. Trained and certified by Principal | | | | | | | |
| Design Engineer | Degree in Electrical Engineering | Solar Power Supply design | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | |

Work Category: Electrical Equipment & Services
Power Supply System

14181600P Solar Power Supply

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission Solar Power Supply and conduct training on operation

Mode of Operation: Manufacturer

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------------------------|---|--|--|---|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in Solar Power Supply production | Manned and permanent office setup Manufacturing facility Testing facility R&D facility | Scope Meter Insulation Resistance Tester Clamp Meter AC/DC Current Probe | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | Voltage Regulator Load Bank Manufacturing Software for Configuration & Diagnostic | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in Solar Power Supply installation, commission and troubleshoot | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in Solar Power Supply design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in Solar Power Supply design | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | Power Supply System |
| 14181700P | UPS - Modular Type |
| | |

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission UPS Modular Type and conduct training on operation

Mode of Operation: Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|---------------|-------------------------------|-------------------------------------|--------------------------|----------------------|--|-----------------------------------|---------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Bookyara | L.g. 10015 | | E.g. 0100, 2001 | E.g. 100, At 1 Ottailua u |
| | | | | | Prinicpal to have minimum 5 years experience in design, engineering and assembly of UPS | | |

Work Category: Electrical Equipment & Services
Power Supply System

14181700P UPS - Modular Type

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission UPS Modular Type and conduct training on operation

Mode of Operation: Assembler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|------------------------|--|--|---|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in UPS production | Manned and permanent office setup Assembling facility Testing facility | Multi Tester Scope Meter Insulation Resistance Tester Clamp Meter | | Business License from Local Authority | |
| Project Coordinator | Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | S. AC/DC Current Probe S. Voltage Regulator T. Load Bank Manufacturing Software for Configuration & Diagnostic | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in UPS installation, commission and troubleshoot. Trained and certified by Principal | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience in UPS design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Work Category: Electrical Equipment & Services
Power Supply System

14181700P UPS - Modular Type

Work Category's Description:

To design, assemble, supply, deliver, install, hook-up, test, commission UPS Modular Type and conduct training on operation

Mode of Operation: Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|------------------------|---|--|--|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | | | | 3, |
| Production Manager | | Minimum 5 years experience in UPS production | Manned and permanent office setup Manufacturing facility Testing facility | Multi Tester Scope Meter Insulation Resistance Tester Clamp Meter | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | 4. R&D facility | 5. AC/DC Current Probe 6. Voltage Regulator 7. Load Bank 8. Manufacturing Software for Configuration & Diagnostic | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in UPS installation, commission and troubleshoot. | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in UPS design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in UPS design | | | | | |

| Work Category: | | Electrical Equipment & Services | | | |
|------------------------------|----------------------------------|--|--|--|--|
| | | Electrical Heating Systems Maintenance | | | |
| | 14131000S | Heat Tracing System Maintenance | | | |
| | | | | | |
| Work Category's Description: | The provision of labour, materia | als, manpower, consumables, equipment and facilities necessary for cleaning, repair, troubleshooting, maintenance, testing and commissioning Heat Tracing System | | | |

Mode of Operation:

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---------------|------------|--------------------------|-----------------|----------------------|---|------------------------|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | | Electrical Equipment & Services |
|----------------|-----------|--|
| | | Electrical Heating Systems Maintenance |
| | 14131000S | Heat Tracing System Maintenance |
| | | |

Work Category's Description:

The provision of labour, materials, manpower, consumables, equipment and facilities necessary for cleaning, repair, troubleshooting, maintenance, testing and commissioning Heat Tracing System

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|--|---------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Bookyara | L.g. 10015 | | L.g. CIDB, DOSH | Lig. 100, Al 1 Ottalida d |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarwak (Form O) for Sarawak company | |

| Work Category: | | Electrical Equipment & Services | | | |
|------------------------------|--|--|--|--|--|
| | Electrical Heating Systems Maintenance | | | | |
| | 14131100S | Process Heater Maintenance | | | |
| | | | | | |
| Work Category's Description: | The provision of labour, materia | als, manpower, consumables, equipment and facilities necessary for cleaning, repair, troubleshooting, maintenance, testing and commissioning of Process Heater | | | |

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Walenbase, Bookyara | 2.g. 1000 | | - ' | 2.g. 100, 71 1 0tandard |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | Electrical Equipment & Services |
|----------------|--|
| | Electrical Heating Systems Maintenance |
| 14131100S | Process Heater Maintenance |
| | |

Work Category's Description:

The provision of labour, materials, manpower, consumables, equipment and facilities necessary for cleaning, repair, troubleshooting, maintenance, testing and commissioning of Process Heater

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|---------------------------|----------------------|---|---|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | L.g. Wareriouse, Dockyaru | L.g. Tools | | L.g. CIDB, DOSH | E.g. 150, AFI Standard | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | General Electrical Services |
| 14141000S | Aircraft Warning Light & System |
| | |

Work Category's Description:

The provision of labour, materials, consumables, equipment and facilities necessary for repair troubleshooting, maintenance, testing and commissioning of Aircraft Warning Light & System

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|-------------------------|----------------------|---|---|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | 3 | 3 | | | | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---------------------------------|
| | General Electrical Services |
| 14141100S | Cathodic Protection Services |

Work Category's Description: The provision of labour, materials, consumables, equipment and facilities necessary for Cathodic Protection services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | |

| Work Category: | | Electrical Equipment & Services |
|------------------------------|---|---|
| | | General Electrical Services |
| | 14141200S | Earthing, Lightning Protection System & Surge Protection Materials |
| Work Category's Description: | The provision of labour, material System & Surge Protection Ma | als, consumables, equipment and facilities necessary for cleaning, repair, upgrading, maintenance, testing and commissioning of Earthing System, Lightning Protection terials |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|----------------------------|---|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|-----------------------------------|
| | General Electrical Services |
| 14141300S | Electrical Cabling & Wiring Works |
| | |

Work Category's Description: The provision of labour, materials, consumables, equipment and facilities necessary to troubleshoot cable fault, jointing, cable laying, test and commission Cable & Wiring

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|----------------------------|---|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | |

| Work Category: | | Electrical Equipment & Services |
|------------------------------|-----------|--|
| | | General Electrical Services |
| | 14141500S | Other General Electrical Services |
| Work Category's Description: | | als, consumables, equipment and facilities necessary to undertake the General Electrical Services such as but limited to Bulbs, Fuses, Light Fittings, Tester, Distribution Control Unit (RCU), MCCB and MCB |

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|-------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warenouse, Bookyara | L.g. 100is | | L.g. CIDB, DOSH | L.g. 100, Art Statidard | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | |

Electrical Equipment & Services
Power Distribution & Control Maintenance
Electrical Motor Maintenance
Explosion Proof Work Category: 14171010S The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, bearing replacement, rewinding, troubleshooting, maintenance, testing and commissioning of Explosion Proof Motors

Work Category's Description:

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|--------------------------|----------------------|----------------------------|---|------------------------|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | |

Electrical Equipment & Services
Power Distribution & Control Maintenance
Electrical Motor Maintenance
Non-Explosion Proof Work Category: 14171011S The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, bearing replacement, rewinding, troubleshooting, maintenance, testing and commissioning of Non-Explosion Proof Motors

Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | 14171100S | Electrical Equipment & Services Power Distribution & Control Maintenance HV Switchages |
|------------------------------|--|---|
| Work Category's Description: | The provision of labour, material HV busduct | als, consumables, equipment and facilities necessary for cleaning, repair, upgrading, maintenance, servicing, testing and commissioning of HV Switchgear inclusive of |
| Mode of Operation: | Self-operated | |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Walenbase, Bookyara | E.g. 100is | | E.g. 130, AFI Stall | 2.g. 100, 71 1 0tandard |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | Electrical Equipment & Services |
|----------------|--|
| | Power Distribution & Control Maintenance |
| 14171200S | Intelligent Motor Control System (IMCS) |

Work Category's Description:

To design, assemble, supply, install, hook up, testing, commissioning, maintenance and training of Intelligent Motor Control System

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|----------------------|---|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 100is | | L.g. CIDB, DOSII | L.g. 150, Ar i Standard |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) insued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | | Electrical Equipment & Services Power Distribution & Control Maintenance |
|------------------------------|--|--|
| | 14171300S | LV Switchgear |
| Work Category's Description: | The provision of labour, materia busduct | als, consumables, equipment and facilities necessary for cleaning, repair, upgrading, maintenance, servicing, testing and commissioning of LV Switchgear inclusive of LV |
| Mode of Operation: | Self-operated | |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|--------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Doonyard | L.g. 10015 | | E.g. CIDB, DOSTI | E.g. 100, At 1 Ottahuaru |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | Electrical Equipment & Services |
|----------------|--|
| | Power Distribution & Control Maintenance |
| 14171400S | Protection Relay Maintenance |
| | |

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrade, maintenance, calibrate, test and commission of Protection Relay

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--------------------------|----------------------|----------------------------|---|------------------------|
| | Key Personnel | | Facilities Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, AFI Standard |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | | Electrical Equipment & Services Power Distribution & Control Maintenance |
|----------------------------|---------------------------------|--|
| | 14171500S | Telecontrol & Substation Automation System Maintenance |
| Work Calegon/e Description | The provision of labour materia | als consumables equipment and facilities necessary for cleaning renair ungrading maintenance troubleshooting testing and commissioning of Flortrical Network |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities Equipment | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. Tools | | E.g. CIDB, DOSH | L.g. 150, Ar i Standard |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | |

| Work Category: | | Electrical Equipment & Services Power Distribution & Control Maintenance |
|------------------------------|--|---|
| | 14171600S | Variable Speed Drives and Soft Starter Maintenance |
| Work Category's Description: | The provision of labour, material System | als, consumables, equipment and facilities necessary for cleaning, repair, upgrading, maintenance, testing and commissioning of Variable Speed Drive and Soft Starter |
| Mode of Operation: | Self-operated | |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|--|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Doonyard | L.g. 10015 | | L.g. CIDB, DOSIT | Lig. 100, 74 Totalidard | | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (Eltc) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | | |

| Work Category: | | Electrical Equipment & Services | | |
|------------------------------|----------------------------------|---|--|--|
| | | Power Supply System Maintenance | | |
| | 14191000S | Batteries | | |
| | | | | |
| Work Category's Description: | The provision of labour, materia | ls, consumables, equipment and facilities necessary for cleaning, maintenance, testing and commissioning of Batteries | | |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 100is | | L.g. CIDB, DOSII | L.g. 150, Ar I Standard | | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | | |

| Work Category: | Electrical Equipment & Services |
|----------------|---|
| | Power Supply System Maintenance |
| 14191100S | Uninterrupted Power Supply (UPS) System |
| | |

Work Category's Description:

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, maintenance, testing and commissioning of ACIDC UPS System

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Lig. Warehouse, Dookyara | E.g. 10015 | | E.g. 0155, 50011 | Lig. 100, Al I Olandard | | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | | |

| Work Category: | | | Electrical Equipment & Services | | |
|----------------|------------------------------|-----------------------------------|--|--|--|
| | | | Transformers & Generators Maintenance | | |
| | | 14201000S | Generator | | |
| | Work Category's Description: | The provision of labour, material | s, consumables, equipment and facilities necessary for cleaning, repair, overhaul, rewinding, refurbish, maintenance, testing and commissioning of Generator | | |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|---|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 100is | | L.g. CIDB, DOSII | L.g. 150, Ar i Standard | | | | |
| | | | | | | Suruhaniaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (EIC) issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | | |

| Work Category: | | Electrical Equipment & Services Transformers & Generators Maintenance | | | |
|-----------------------------|-------------------------------|--|--|--|--|
| | 14201100S | Transformer | | | |
| Work Catagory's Description | The provision of labour mater | ials consumables equinment and facilities necessary for cleaning repair querbaul rewinding refurbish oil filtration and regeneration maintenance testing and | | | |

commissioning of Transform

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|--|-------------------------|----------------------|---|---|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | | <u> </u> | | - ' | | | | |
| | | | | | | Suruhanjaya Tenaga (ST) for Semenanjung Malaysia and Sabah company or Certificate of Registration as an Electrical Installation Contractor (Elic issued by Director of Electricity Supply Sarawak (Form O) for Sarawak company | | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Associated Services
15101000S Anti-Corrosion & Concrete Pipeline Coating

Work Category's Description: Provision of labor, material, equipment, services and facilities for Pipeline Insulation Coating including but not limited to hot, cold, corrosion coating, concrete weight coating and internal coating

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|-------------------------------|---|---|--|---|---------------------------------------|------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | | - | | · . | 3 , | | | |
| Project / Technical Manager | | Minimum 7 years experience in oil and gas with a minimum 5 years experience in pipeline coating | Manned and permanent office setup Manufacturing Plant Storage Loadout Test Facilities | Test Facilities Specification & Equipment *Company to provide the list of equipment, quantity, owned/ rent, owner (if rented). | | Business License from local authority | | | | |
| Lead / Senior Engineer | | Minimum 5 years experience in oil and gas with a minimum 3 years experience in pipeline coating | | | | | | | | |
| Project Coordinator / Planner | | Minimum 3 years experience in oil and gas with a minimum 3 years experience in pipeline coating | | | | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) |
|----------------|-----------|---|
| | | Associated Services |
| | 15101100S | Marine Warranty Survey |
| | | |

The provision of suitability survey for installation vessel & supporting tugsbarges, witnessing, verifying, reviewing, approving procedure, attend installation activities and issue certificate of approval (platform, pipeline & subsea facilities), attend construction risk assessment and fabrication yard (trail fitting, dimensional check, see-lastering & loud operation)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-----------------|-------------------------------|---|------------------------------|---|-----------------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | | 5 | | | | | | |
| Project Manager | Degree in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | | | | | | | |
| Naval Architect | Degree in naval architect | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | | |
| Master Mariner | Master of Foreign Going | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | | |
| QA / QC Manager | Degree in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | | |

| Work Category: | 15101200S | Engineering, Construction & Projects (EC&P) Associated Services Pipeline Pre-Commissioning & Commissioning |
|------------------------------|---|--|
| Work Category's Description: | The provision of PMT, procedures, launcher/receiver, materials & cons | labour, equipment, services and facilities for offshore and onshore pipeline cleaning, pigging, gauging, fill, hydrotest, dewatering, drying, inerting including provision of pigs, temporary sumables (including chemicals) |

Mode of Operation:

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---|--|---|--|--|----------------------|---|-----------------------------------|--|--|--|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| | **** | | | | | | | | | |
| Project Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Pre-Commissioning & Commissioning Equipment (Owned / Lease) | | | | | | |
| Construction / Installation / Engieneering Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | | |
| QA /QC Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | | |
| HSE Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) Consultancy Services | | |
|------------------------------|--|--|--|--|
| | 15111000S | Decomissioning Study of Offshore Facilities | | |
| Work Category's Description: | The provision of service for decommissioning feasibility study for D&A Late Life Planning and Preparation, D&A Regulatory Compliant & Permitting, D&A Facilities Hook-down/Facilities Making a distonce facilities | | | |

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------------------|-------------------------------|--|--|---|----------------------|---|---|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | = | | | |
| Project /Technical Manager | Degree/Diploma in engineering | Minimum 15 years experience in engineering with a minimum 8 years experience in D&A Industries, minimum 5 years experience in D&A study and Engineering work | Proper & Manned Office Setup | Engineering software & drafting facilities e.g OrcaFlex | | | Quality Management System HSE Management System |
| D&A Lead/ Senior Engineer | Degree/Diploma in engineering | Syears experience in offshore oil and gas design engineering with a minimum 5 years experience in D&A study and Engineering work | | | | | |
| Environment Exec | Degree in Enviroment | Minimum 7 years experience in engineering with a minimum 5 years experience in D&A position (offshore or onshore) | | | | | |
| Regulatory Compliance Manager | Any related degree or diploma | Minimum 7 years experience in engineering with a minimum 5 years experience in D&A position (offshore or onshore) | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|---|
| | Consultancy Services |
| 15111000S | Decomissioning Study of Offshore Facilities |
| | |

Work Category's Description:
The provision of service for decommissioning feasibility study for D&A Late Life Planning and Preparation, D&A Regulatory Compliant & Permitting, D&A Facilities Hook-down/Facilities Making Safe, Removal & Remediation for offshore facilities

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-------------------------------|-------------------------------|--|--|---|----------------------|---|---|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project /Technical Manager | Degree/Diploma in engineering | Minimum 15 years experience in engineering with a minimum 8 years experience in D&A Industries, minimum 5 years experience in D&A study and Engineering work | Proper & Manned Office Setup | Engineering software & drafting facilities e.g OrcaFlex | | | Quality Management System HSE Management System |
| D&A Lead/ Senior Engineer | Degree/Diploma in engineering | 8 years experience in offshore oil and gas design engineering with a minimum 5 years experience in D&A study and Engineering work | | | | | |
| Environment Exec | Degree in Enviroment | Minimum 7 years experience in engineering with a minimum 5 years experience in D&A position (offshore or onshore) | | | | | |
| Regulatory Compliance Manager | Any related degree or diploma | Minimum 7 years experience in engineering with a minimum 5 years experience in D&A position (offshore or onshore) | | | | | |

| Work Category: | 15111300S | Engineering, Construction & Projects (EC&P) Consultancy Services Project Management - Plant | | |
|------------------------------|----------------------------------|--|--|--|
| Work Category's Description: | The provision of Project Managem | The provision of Project Management Services for plant construction, rejuvenation and major maintenance work | | |
| Mode of Operation: | Self-operated | | | |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|----------------------------|-------------------------------|---|--|-------------------------------|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 100is | | L.g. CIDB, DOSI1 | E.g. 150, API Standard |
| Lead/Senior Civil Engineer | Degree in Civil Engineering | 10 years experience in plant engineering | Proper office setup | StaadPro/Prokon or equivalent | | | |
| Civil Engineer | | 5 years experience in plant engineering | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Decommissioning
15121000S
Decommissioning
Offshore Facilities

Work Category's Description:

The provision of PMT, manpower, engineering, procdures, derrick barge-lesses inclusive of marine spread, transportation spread, decommissioning equipment, diving spread, ROV spread, heavy lift rigging, NDT services, survey & positioning, and specialize services which includes environmental & consultancy services required for decommissioning, removal and disposal of diffshore facilities

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|--|---|--|---|---|-----------------------------------|--|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | 9 | | | |
| Project Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Derrick barge/vessel (Owned/Lease) 2. Decommissioning Equipment (Owned/Lease) | | | |
| Construction / Installation / Engineering Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA /QC Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) | | |
|------------------------------|-----------|---|--|--|
| | | Decommissioning | | |
| | 15121000S | Decomissioning of Offshore Facilities | | |
| | | | | |
| Work Category's Description: | | r, engineering, procedures, derrick barge/vessel inclusive of marine spread, transportation spread, decommissioning equipment, diving spread, ROV spread, heavy lift rigging, NDT services, | | |

Self-operated

Mode of Operation:

| | | | MINIMUM TECHNI | MINIMUM TECHNICAL REQUIREMENT | | | | | |
|--|--|---|--|---|----------------------|---|-----------------------------------|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | | 9. 15315 | | g, | | | |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Derrick barge/vessel (Owned/Lease) 2. Decommissioning Equipment (Owned/Lease) | | | | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) |
|----------------|-----------|--|
| | | Decommissioning |
| 1 | 15121100S | Decomissioning of Onshore Facilities/Project |
| | | |

Work Category's Description:

The provision of PMT, manpower, engineering, procedures, decommissioning equipment, demolition, NDT services, and specialize services which includes environmental & consultancy services required for decommissioning removal, demolition, nemediation and discossal or onshore unstream and downstream facilities

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|--|-------------------------------|---|--|---|----------------------|---|---|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | = | | 1.8, 1 | - ' |
| Project Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | Decommissioning Equipment (Owned/Lease) | | | Quality Management System HSE Management System |
| Construction/ Installation/ Engineering Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|--|
| | Decommissioning |
| 15121100S | Decomissioning of Onshore Facilities/Project |
| | |

Work Category's Description:

The provision of PMT, manpower, engineering, procedures, decommissioning equipment, demolition, NDT services, and specialize se removal, demolition, remediation and disposal of onshore upstream and downstream facilities

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|--|---------------|---|--|---|----------------------|---|---|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | ' - | | - ' | = ' |
| Project Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | Decommissioning Equipment (Owned/Lease) | | | Quality Management System HSE Management System |
| D&W Construction /Engineering Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| | - ' | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Engineering Services for Greenfield & Brownfield Projects
15131000S
Commissioning Engineering Services

Work Calegory's Description:

The provision of engineering commissioning services for precommissioning, startup, commissioning

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|------------------|---|---|--|--|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | - | | | |
| Project Manager | Degree in Engineering | Min ten (10) years experience in managing similar scope of services | Proper office setup | Company to have existing Engineering software (leased or owned) and qualified operator of | | Valid registration with BEM (Board of Engineers Malaysia) | |
| Lead Engineers | Degree in Engineering of respective discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | following as minimum, whichever is relevant for respective discipline: 1. Process - Process Simulation and Analysis: HYSIS and PIPESIM or | | | |
| Senior Engineers | Degree in Engineering of respective discipline | Min five (5) years of respective discipline experience in managing similar scope of services | | equivalent of the respective, OR 2. Mechanical Pressure Vessel and Exchanger Design & Analysis: PV ELITE or equivalent, OR, visa and Design, CEASAR or equivalent, OR, etc. and Design, CEASAR or equivalent (DR 4. Electrical – Power System Design and Analysis: EDSA or equivalent (ETAPSKM), OR 5. Cwill & Structural – Structural – Analysis and Drafting, SACS and Analysis and Drafting, SACS and Analysis and Drafting SACS and Instrument of the Instrument design and distabase: Instrument design an | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Engineering Services for Greenfield & Brownfield Projects
Draughting Services

15131110S
Deepwater Pipeline Design & Draughting Services

Work Category's Description: The provision of engineering feasibility study, conceptual design and Front End Engineering Design (FEED) services for deepwater pipeline design such as but not limited to pipeline/riser

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---|--|--|----------------------|---|-----------------------------------|--------------------------------|--|--|--|
| Key Personnel Designation Qualification Experience | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| LeadSenior Engineer | Engineering/Pipeline Engineering/Mechanical Engineering/Mechanical Engineering/Marine Engineering/ Structural/Naval Architecture Or B.Eng/Diploma in any relevent engineering discipline, preferably | 12 years experience in offshore of and gas design engineering with a minimum 7 years of experience in pipeline/riser engineering. 12 years experience in offshore oil and gas design engineering with a minimum 10 years of experience in pipeline / riser engineering. | Proper office setup | Company to provide the list of engineering varieties of the engineering workstation hardware software (e.g. FLEXCOM, ORCA-ELEX, ANSYS, ABACUS) or any relevant engineering program. "Company to provide list of software(e) and copy of the software (icenset(e)). | | Registration with BOE (Form F) | | | |

Work Category:

Engineering, Construction & Projects (EC&P)

Engineering Services for Greenfield & Brownfield Projects

15131300S Major Engineering - Conceptual Engineering Design/FEED/Detailed Design

Work Category's Description:

The provision to perform engineering works include Conceptual Engineering Design/Feasibility Studies (which required deliverables to be used for FEED/ Detailed Design) and FEED/Detailed Design services (which required deliverables to be used for subsequent Engineering stage, Procurement, Fabrication, Installation, Commissioning and Start-Up of the facilities for onshore or dishore). Example of deliverables for Conceptual engineering design are Concept Layouts, HSE Philosophies, Process Flow Diagram, Simulation Report, etc. Example of deliverables for FEED/ Detailed Design are Data Sheets, Project Execution Plan, Control Strategy and System Overview Sketches, HSE plan, P&IDs, Weight Management, Transportation, Installation, Risk Assessment, etc.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------|-------------------------------|---|--|---|---|---|----------|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | | - | | - ' | <u> </u> | | | |
| Project Manager | | Min twelve (12) years experience in managing similar scope of services | | Company to have existing Engineering software (leased or owned) and qualified operator of following as minimum: 1.Process Simulation and Analysis: HYSIS and PIPESIM or equivalent of the respective 2.Pressure Vessel and Exchanger | Engineering Design/Feasibility Studies/FEED/Detailed Design for at least 1 project for the past 5 years | Valid registration with BEM (Board of Engineerings Malaysia) | | | | |
| Lead Engineers | respective discipline | Min ten (10) years of respective discipline experience in managing similar scope of services | | Design & Analysis: PV ELITE or equivalent 3.Pipe Stress Analysis and Design: CEASAR or equivalent CEASAR or equivalent (CTAP/SKM) 5.Structural Analysis and Drafting: SACS and BOCAD or equivalent of the respective 6.Instrument design and database: | | | | | | |
| Senior Engineers | respective discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | Ostation and part of Constants Intervaled of the respective Typeline design analysis and simulation of the respective Typeline design analysis and simulation: CEASER 2 and AGA or equivalent of the respective Company to provide list of software(s) and copy of the software license(s). | | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|---|
| | Engineering Services for Greenfield & Brownfield Projects |
| 15131400S | Naval Architecture & Marine Engineering |
| | |

Work Category's Description: The provision to perform engineering works include Feasibility Studies' Conceptual Engineering Design which required deliverables to be used for FEED/ Detailed Design

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|---|--|--|---|-----------------------------------|------------------------|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | E.g. 100is | | E.g. 0155, 50011 | E.g. 150, AFT Standard | | |
| Lead Engineer | | Min 7 years experience in managing similar scope of services | | The company to provide IT facilities (e.g. video/teleconference) *Principal to provide list of software(s) and copy of the software license(s). | | | | | |

| Work Category: | | | | |
|------------------------------|--------------------------------------|--|--|--|
| | | Engineering Services for Greenfield & Brownfield Projects | | |
| | 15131400S | Naval Architecture & Marine Engineering | | |
| | | | | |
| Work Category's Description: | The provision to perform engineering | ng works include Feasibility Studies/ Conceptual Engineering Design which required deliverables to be used for FEED/ Detailed Design for Naval Architecture and Marine Engineering | | |

Work Category's Description:

Mode of Operation:

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|------------------|---|---|--|---|---|---|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Bachelor Degree in Engineering | Min twelve (12) years experience in managing similar scope of services | | | Company must have a minimum experience in executing Naval Architecture and Marine Feasibility Studies and Conceptual Engineering | | |
| Lead Engineers | respective discipline | Min ten (10) years of respective discipline experience in managing similar scope of services | | Structural/Finite Element software: e.g. ANSYS, SESAM, AQUA, Abacus, or equivalent Hydrodynamics: e.g. WAMIT/HydroD or equivalent Stability: e.g. GHS, Autohydro, HydroD or equivalent | tor at least 1 project for the past 5 years | | |
| Senior Engineers | respective discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | 4. Coupled Analysis: e.g., Winpost, DeepC or equivalent 5. Mooring Analysis: e.g., MMOSA, SIMO, Orcaller, or equivalent 6. CAD: e.g., PDMS, AutoCAD, or equivalent "Company to provide list of software(s) and copy of the software license(s). | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Engineering Services for Greenfield & Brownfield Projects
Specialised Engineering
15131610S
Civil & Structural

Work Category's Description: The provision to undertake small scale projects such as but not limited to specific platform/plant modification, retrofiting, rejuvenation engineering for Civil & Structural discipline

Mode of Operation: Self-operated

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|---|--|--|--------------------------|---|----------------------|--|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | = | | = " " | = : |
| 1 Project Manager | Degree in Engineering | Min ten (10) years experience in managing similar scope of services | | Company to have existing Engineering software (leased or owned) and qualified operator of following as minimum: 1.Structural Analysis and Drafting: | | Valid registration with BEM (Board of Engineers Malaysia) | |
| | Degree in Engineering of respective discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | SACS and BOCÁD or equivalent of the respective Company to provide list of software(s) and copy of the software license(s). | | | |
| Senior Engineers (Civi & Structural discipline) One of two shall be permanent staff | Degree in Engineering of respective discipline | Min five (5) years of respective discipline experience in managing similar scope of services | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Engineering Services for Greenfield & Brownfield Projects
Specialised Engineering
151316118
Control & Instrumentation

Work Category's Description: The provision to undertake small scale projects such as but not limited to specific platform/plant modification, retrofitting, rejuvenation engineering for Control & Instrumentation discipline

Mode of Operation: Self-operated

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|---|--|---|--|--|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 100is | | L.g. CIDB, DOSH | L.g. 150, AFT Standard |
| 1 Project Manager | Degree in Engineering | Min ten (10) years experience in managing similar scope of services | | Company to have existing Engineering software (leased or owned) and qualified operator of following as minimum: 1. Instrument design and database: | | Valid registration with BEM (Board of Engineers Malaysia) | |
| 1 Lead Engineer (Control & Instrumentation discipline) Shall be permanent staff and Professional Engineer (PE) | Degree in Engineering of respective discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | Instrucent obsign and database: InstrucALC and INTOOLS or equivalent of the respective | | | |
| Senior Engineers (Control & Instrumentation discipline) One of two shall be permanent staff | Degree in Engineering of respective discipline | Min five (5) years of respective discipline experience in managing similar scope of services | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Engineering Services for Greenfield & Brownfield Projects
Specialised Engineering
15131612S
Electrical

Work Category's Description: The provision to undertake small scale projects such as but not limited to specific platform/plant modification, retrofitting, rejuvenation engineering for Electrical discipline

Mode of Operation: Self-operated

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|---|--|---|----------------|--|---|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | = | | | |
| 1 Project Manager | Degree in Engineering | Min ten (10) years experience in managing similar scope of services | | Company to have existing Engineering software (leased or owned) and qualified operator of following as minimum: | | Valid registration with BEM (Board of Engineers Malaysia) | |
| 1 Lead Engineers (Electrical discipline) Shall be permanent staff and Professional Engineer (PE) | Degree in Engineering of respective discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | Power System Design and Analysis: EDSA or equivalent (ETAP/SKM) *Company to provide list of software(s) and copy of the software license(s). | | | |
| 2 Senior Engineers (Electrical discipline) One of two shall be permanent staff | Degree in Engineering of respective discipline | Min five (5) years of respective discipline experience in managing similar scope of services | | | | | |

Engineering, Construction & Projects (EC&P)
Engineering Services for Greenfield & Brownfield Projects
Specialised Engineering
Mechanical & Piping Work Category:

15131613S

Work Category's Description: The provision to undertake small scale projects such as but not limited to specific platform/plant modification, retrofitting, rejuvenation engineering for Mechanical & Piping discipline

Mode of Operation: Self-operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|---------------|---|--------------------------|---|----------------------|--|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | 9 | | 9, | E.g. 100, Al Fotandard |
| 1 Project Manager | | Min ten (10) years experience in managing similar scope of services | | Company to have existing Engineering software (leased or owned) and qualified operator of following as minimum: 1.Pressure Vessel and Exchanger | | Valid registration with BEM (Board of Engineers Malaysia) | |
| 1 Lead Engineer (Mechanical/Piping discipline) Shall be permanent staff and Professional Engineer (PE) | | Min seven (7) years of respective discipline experience in managing similar scope of services | | Design & Analysis: PV ELITE or equivalent "Company to provide list of software(s) and copy of the software license(s). | | | |
| Senior Engineers ((Mechanical/Piping discipline) One of two shall be permanent staff | discipline | Min five (5) years of respective discipline experience in managing similar scope of services | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)

Engineering Services for Greenfield & Brownfield Projects
Specialised Engineering

15131614S
Pipeline

Work Category's Description: The provision to undertake small scale projects such as but not limited to specific platform/plant modification, retrofitting, rejuvenation engineering for Pipeline discipline

Mode of Operation: Self-operated

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|--|--|---|-------------------------|---|---|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | <u> </u> | L.g. 10018 | | E.g. CIDB, DOSIT | |
| 1 Project Manager | Degree in Engineering | Min ten (10) years experience in managing similar scope of services | | Company to have existing Engineering software (leased or owned) and qualified operator of following as minimum: | | Valid registration with BEM (Board of Engineers Malaysia) | |
| Lead Engineer (Pipeline discipline Shall be permanent staff and Professional Engineer (PE) | Degree in Engineering of respective discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | Pipeline design, analysis and simulation: CEASER 2 and AGA or equivalent of the respective *Company to provide list of software(s) and copy of the software license(s). | | | |
| 2 Senior Engineers (Pipeline discipline) One of two shall be permanent staff | Degree in Engineering of respective discipline | Min five (5) years of respective discipline experience in managing similar scope of services | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)

Engineering Services for Greenfield & Brownfield Projects

Specialised Engineering

1513161SS Process

Work Category's Description: The provision to undertake small scale projects e.g. specific platform/plant modification, retrofitting, rejuvenation engineering for Process discipline

Mode of Operation: Self-operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|-----------------------|---|--|---|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | • | | | | |
| 1 Project Manager | Degree in Engineering | Min ten (10) years experience in managing similar scope of services | | Company to have existing Engineering software (leased or owned) and qualified operator of following its minimum: and Arabysis: HYSEs and PIPESIM or equivalent of the respective | | Valid registration with BEM (Board of Engineers Malaysia) | |
| Lead Engineer (Process discipline) Shall be permanent staff and Professional Engineer (PE) | discipline | Min seven (7) years of respective discipline experience in managing similar scope of services | | | | | |
| 2 Senior Engineers (Process discipline) One of two shall be permanent staff | | Min five (5) years of respective discipline experience in managing similar scope of services | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Engineering Services for Greenfield & Brownfield Projects

15131700S Subsea Engineering Services

Work Category's Description:

The provision of engineering services including but not limited to Feasibility Study and Concept Select Study services for Subsea Engineering

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------------------|---------------|--|--|---|--|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warenouse, Bookyara | 3 | | 3 . , | Lig. 100, Al Totalidard |
| Project/Technical Manager | discipline | 10 years experience in offshore oil and gas engineering with a minimum 5 years of experience in Subsea engineering design | | engineering workstation/hardware/ software (e.g. HYSYS, PIPESIM, ACAD) & drafting facilities. | Company must have a minimum experience in executing Subsea Feasibility Studies and Conceptual Engineering for at least 1 project for the past 5 years. | | |
| Lead/Senior Engineer | discipline | 10 years experience in offshore oil and gas engineering with a minimum 8 years of experience in Subsea engineering design | | software(s) and copy of the software license(s). | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Marine Systems - Deepwater
15141010P Anchor, Buoys & Mooring Line

Work Category's Description: To supply and design Deepwater Anchoring System, Deepwater Buoys System and Deepwater Mooring Line such as but not limited to wire tope, chain, polyester rope, connectors, fairlead and mooring jack

| | | | MINIMUM TECHNIC | MINIMUM TECHNICAL REQUIREMENT | | | | |
|-------------|---------------|------------|--|-------------------------------|---|---|-----------------------------------|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Lig. Warehouse, Bookyara | L.g. 10015 | | | Lig. 100, Al Totalidard | |
| | | | | | Principal to have minimum 5 years experience in supply and design of Deepwater Anchoring System/Deepwater Buoys System/Deepwater Wooring Line (Company to provide list of experiences). | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Marine Systems — Deepwater

15141010P Anchor, Buoys & Mooring Line

Work Category's Description: To supply and design Deepwater Anchoring System, Deepwater Buoys System and Deepwater Mooring Line i.e. wire rope, chain, polyester rope, connectors, fairlead and mooring jack, etc.

Mode of Operation: Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|----------------------|--|-------------------------------------|--|-------------------------|----------------------|---|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Lead/Senior Engineer | Matter in any relevant engineering discipline, preferably Mechanical Engineering Matter Engineering Matter Engineering Matter Engineering Matter Structural Risser Engineering / Pipeline Engineering / Pipeline Engineering / Pipeline Engineering / Pipeline Engineering discipline, preferably Mechanical Engineering discipline, preferably Mechanical Engineering Matter & Architectural Engineering Natural Architectural Pipeline Engineering | 5 years of experience in supply and | Proper office setup, Manufacturing Plant, Storage and Test Facilities | | | | |

Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Marine Systems - Deepwater
Single Point Mooring Work Category:

15141011P

Work Category's Description: To supply and design of deepwater single point mooring/turret

Mode of Operation:

| | | | MINIMUM TECHNIC | MINIMUM TECHNICAL REQUIREMENT | | | | |
|---------------|---------------|--|--------------------------|-------------------------------|---|-----------------------------------|------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.y. 100is | | E.g. CIDB, DOSH | E.g. 150, API Standard | |
| | | | | | Principal to have minimum 5 years experience in supply and design of single point mooring system/turret | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Marine Systems - Deepwater

15141011P Single Point Mooring

Work Category's Description: Supply and design of deepwater single point mooring/turret

Mode of Operation: Manufacture

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|----------------------|--|---|--|-------------------------|----------------------|---|-----------------------------------|
| B | Key Personnel | 5 | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Lead/Senior Engineer | Qualification Master in any relevent engineering descipine, preferably Mechanical descipine, preferably Mechanical descipine, preferably Mechanical Engineering Pipoline Engineering Or Serval Architectural Marine Engineering Descipine, preferably Mechanical Engineering Shouteral Risse Engineering/Shouteral Risse Engineering/Shouteral Risse Engineering/Shouteral Marine Engineering Marine Engineering | | E.g. Warehouse, Dockyard Proper office setup, Manufacturing Plant, Storage and Test Facilities | E.g. Tools | Company's Experence | Eg. CIDB, DÖSH | E.g. ISO, API Standard |
| | | | | | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Marine Systems - Single Point Mooring System

15141110P Buoy

Work Category's Description:

To design, manufacture, supply, install, and test Buoy at marine structure

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|-----------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | L.g. 100is | | E.g. CIDB, DOSI1 | L.g. 150, Art Standard | | | |
| | | | | | Principal to have minimum 5 years proven track records of SPM Buoy supply and manufacturing | | | | | |

Work Category:
Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Marine Systems - Single Point Mooring System

15141111P Hose System

Work Category's Description:

To design, manufacture, supply, install, and test Hose System at marine structure

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | L.g. 100is | | E.g. CIDB, DOSIT | L.g. 150, Art Standard | | | |
| | | | | | Principal to have minimum 5 years proven track records of SPM Hose system supply and manufacturing | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Marine Systems - Single Point Mooring System

15141112P Mooring Systems

Work Category's Description:

To design, manufacture, supply, install, and test Mooring System at marine structure

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | L.g. roots | | E.g. 0155, 50011 | L.g. 150, AFT Standard | | |
| | | | | | Principal to have minimum 5 years proven track records of SPM Mooring System supply and manufacturing | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|--|
| | Fabrication & Construction |
| 15141300S | Offshore - Floating Production Facilities (FPSO/FSO) |
| | |

Work Category's Description: Provision to perform fabrication for Floating Offshore Facilities which include new-built/conversion/refurbishment/supply/operation/maintenance such as but not limited to FPSO, FSO, TLP. SPAR and Semi-sub

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|---|--|--|-------------------------|--|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | L.g. Waterlouse, Dockyaru | L.g. Tools | | E.g. CIDB, DOSIT | |
| Company/ Principal: Project Manager | Bachelor Degree in Engineering | Min ten (10) years experience in managing similar scope of services | Proper office setup | | Principal to have at least 10 years experience in Oil and Gas business with minimum of 5 years of proven track record in floating offshore facilities business | | |
| | engineering discipline, preferably Naval Architecture/ Marine Engineering/ Mechanical | S years experience in Oil and Gas business with a minimum of 3 years of operation/design/ fabrication/ conversion of Floating Offshore Facilities e.g.: FSO, FPSO, FPS, TLP, Spar, Semisub, etc | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|--|
| | Fabrication & Construction |
| 15141300S | Offshore - Floating Production Facilities (FPSO/FSO) |
| | |

Work Category's Description: Provision to perform fabrication for Floating Offshore Facilities which include new-built/conversion/ refurbishment/supply/operation/maintenance such as but not limited to FPSO, FSO, TLP, SPAR, Semi-sub, etc.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|-----------------|-------------------------------|--|--------------------------|-------------------------|----------------------|---|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. roots | | L.g. CIDB, DOSIT | L.g. 150, AFT Standard |
| Project Manager | | Min ten (10) years experience in managing similar scope of services | Proper office setup | | | | |
| | Engineering/ Mechanical | 5 years experience in Oil and Gas business with a minimum of 3 years of operation/design/ fabrication/ conversion of Floating Offshore Facilities e.g.: FSO, FPSO, FPS, TLP, Spar, Semisub, etc | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|--|
| | Fabrication & Construction |
| 15141400S | Offshore - Mobile Production Facilities (MOPU) |
| | |

Work Category's Description: Provision to perform fabrication for Mobile Offshore Facilities which includes new-built/conversion/refurbishment/supply/operation/maintenance such as but not limited to MOPU, MODU, MOPSU and MOAB

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|------------------------------------|--|---|--|-------------------------|--|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | L.g. Waterloase, Dockyaru | L.g. 100is | | E.g. CIDB, DOSIT | L.g. 150, Art Standard |
| Company/ Principal:Project Manager | | Min ten (10) years experience in managing similar scope of services | Proper office setup | | Principal to have at least 10 years experience in Oil and Gas business with minimum of 5 years of proven track record in Mobile Offshore Facilities business | | |
| Company/ Principal: Lead Engineers | engineering discipline, preferably Naval Architecture/ Marine | 5 years experience in Oil and Gas business with a minimum of 3 years of operation/design/fabrication/ convension of Nobile Offstore Facilities e.g.: MOPU, MODU, MOPSU, MOAB, and etc. | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|--|
| | Fabrication & Construction |
| 15141400S | Offshore - Mobile Production Facilities (MOPU) |
| | |

Work Category's Description: Provision to perform fabrication for Mobile Offshore Facilities which includes new-built/conversion/refurbishment/supply/ operation/maintenance such as but not limited to MOPU, MOPU, MOPSU, MOAB, etc.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-----------------|--|---|--|-------------------------|----------------------|---|-----------------------------------|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyard | L.g. 10018 | | L.g. CIDB, DOSI1 | L.g. 150, AFT Standard | |
| Project Manager | Bachelor Degree in Engineering | Min ten (10) years experience in managing similar scope of services | Proper office setup | | | | | |
| Lead Engineers | Bachelor Degree in any relevent engineering discipline, preferably Naval Architecture Marine Engineering Mechanicate Engineering Oncotanal Riser Engineering Oncotanal Riser Engineering Plpelina Engineering Master is preferred. | 5 years experience in Oil and Gas business with a minimum of 3 years of operation/design/ labinization conversion of Mobile Offshore Facilities e.g. AIOPU MODU, MOPSU, MOAB, and etc. | | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Structural & Pijning Fabrication/Wolding Services
15141910S Metallic - Carbon Steel, Stainless Steel, Non-Ferrous, Internally Lined Pipe & etc.

Work Category's Description: The provision of labour, materials, consumables, equipments and facilities necessary for fabrication, repair and maintenance of metallic ipping, internally lined pipe and structure

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|-----------------|--|--|--|--|----------------------|---|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | - | | | <u> </u> |
| Engineer | Degree in Mechanical Engineering Or relevant field | 3 years experience in piping and structure repair and maintenance | Workshop and proper office setup | Generator set, welding set, air compressor. *Company to provide the list of | | | Welding Procedure Specification (WPS) |
| Supervisor | Diploma in Mechanical Engineering Or relevant field | 5 years experience in piping and structure repair and maintenance | | equipment, quantity, owned/ rent, owner (if rented). | | | |
| | Or Certificate inrelated field | Or 7 years experience in piping and structure repair and maintenance | | | | | |
| Quality Control | Diploma in Mechanical Engineering Or relevant field Or Certificate in related field | S years experience in piping and structure repair and maintenance Or 7 years experience in piping and structure repair and maintenance | | | | | |
| | | | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Structural & Pijong Pabrication/Wolding Services

15141911S
Non Metallic - PVC, PVC, HDPE, Fibreglass & etc.

Work Category's Description: The provision of labour, materials, consumables, equipments and facilities necessary for fabrication, repair and maintenance of non-metallic piping

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|-----------------|--|--|--|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | - | | - ' | = ' |
| Engineer | Degree in Mechanical Engineering Or relevant field | 3 years experience in piping and structure repair and maintenance | Workshop and proper office setup | *Company to provide the list of equipment, quantity, owned/ rent, | | | |
| Supervisor | Diploma in Mechanical Engineering Or relevant field | 5 years experience in piping and structure repair and maintenance | | owner (if rented). | | | |
| | Or Certificate inrelated field | Or 7 years experience in piping and structure repair and maintenance | | | | | |
| Quality Control | Diploma in Mechanical Engineering Or relevant field | 5 years experience in piping and structure repair and maintenance | | | | | |
| | Or Certificate in related field | Or 7 years experience in piping and structure repair and maintenance | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) |
|------------------------------|------------------------------------|---|
| | | Fabrication & Construction |
| | 15142000P | Subsea Systems & Umbilical |
| Work Category's Description: | Piping & Connection System (e.g. m | test, supply, deliver, install, hookup, commissioning of Subsea Systems & Umbilical such as but not limited to Subsea Production Control System (SPCS), Subsea Structure, Foundation, tanifold, PLET, PLEM, SLED, rigid jumper), Subsea Boosting & Separation System, Subsea Metering (single- or multi-phase) Subsea Production Control Umbilical (steel tube and/or mnunication) for static & dynamic services, umbilical accessories & proprietary items |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|-----------------------------------|------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | Lig. Warehouse, Dookyara | E.g. 100is | | L.g. 0.55, 50011 | L.g. 150, AFT Standard | |
| | | | | | Principal to have minimum 3 years experience in Subsea System & Umbilical related works in oil and gas industry in accordance to ISO13628/API 17 (Company to provide minimum 2 projects) | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Fabrication & Construction

15142000P
Subsea Systems & Umbilical

Work Category's Description:

To design, manufacture, assemble, test, supply, deliver, install, hookup, commissioning of Subsea Systems & Umbilical such as but not limited to Subsea Production Control System (SPCS), Subsea Structure, Foundation Piping & Connection System (e.g. manifold, PLET, PLEM, SLED, rigid jumper), Subsea Bosoning & Separation System, Subsea Metering (single- or multi-phase) Subsea Production Control Umbilical (steel tube and/or thermoplastic hose and/or power/communication) in state da dynamic services, umbilical accessories & proprietary terms

ide of Operation: Manufacture

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|---------------------------------------|--|--|---|-----------------------------------|----------------------|---|-----------------------------------|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation Project/Technical Manager | Qualification Degree/Diploma in any related engineering discipline | Experience 15 years experience in offshore oil and gas with a minimum 5 years of experience in providing related services e.g. Subsea Engineering | Comprehensive office setup Manufacturing Plant Storage Loadout facilities Test facilities | Manufacturing and test facilities | | <u> </u> | • | |
| Lead/Senior Engineer | Degree/Diploma in any related engineering discipline | It years experience in offshore oil and gas with a minimum 5 years of superience in providing related services e.g. Subsea Production Control System (PSPCs) and installation & Workover Control System (MOSC) design, Subsea Umbilical Design | | | | | | |
| QA/QC Manager | Degree in any related engineering discipline | 10 years' experience in oil and gas with a minimum 5 years of experience in providing related services e.g. Subseat Production Control System (PSCN) and Sobies Unmilitied menulicidum § & storing related works. | | | | | | |
| HSE Manager | Degree in any related engineering discipline | 10 years' experience in cil and gas with a minimum syars of experience in providing related services e.g. Subsea Production Control System (SPCS) and Subsea Unballion Unbillical manufacturing & testing related works | | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) |
|----------------|-----------|---|
| | | Integrated EPC/EPCIC |
| | 15161100S | Offshore - Floating Production Facilities (FPSO/FSO - EPC/EPCC/EPCIC) |
| | | |

Work Category's Description:
Provision to perform Engineering, Procurement, Fabrication, Installation, Commissioning and Start-Up the facilities for Floating Offshore Facilities which include new-built/conversion/refurbishment/supply/operation/maintenance such as but not limited to FPSO, FSO, TLP, SPAR and Semi-sub

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | |
|--|---|---|-------------------------|----------------------|--|-----------------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | g | | | |
| Company/ Principal: Project Manager | Bachelor Degree in Engineering | Min ten (10) years experience in managing similar scope of services | Proper office setup | | Principal to have at least 10 years experience in Oil and Gas business with minimum of 5 years of proven track record in floating offshore facilities business | | |
| Company/ Pfincipal: Lead Engineers | engineering discipline, preferably Naval Architecture/ Marine Engineering/ Mechanical | Syears experience in Oll and Gas business with a minimum of 3 years of operation/design/fabrication/ conversion of Posing Offshore Facilities e.g.: FSO, FPSO, FPS, TLP, Spar, Semisub, etc. | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) | | |
|----------------|-----------|--|--|--|
| | | Fabrication & Construction | | |
| | 15161100S | Offshore - Floating Production Facilities (FPSO/FSO) | | |
| | | | | |

Work Category's Description:

Provision to perform Engineering, Procurement, Fabrication, Installation, Commissioning and Start-Up the facilities for Floating Offshore Facilities which include new-built/conversion/refurbishment/supply/operation/maintenance such as but not limited to FPSO, FSO, TLP, SPAR and Semi-sub

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-----------------|--|--|--|-------------------------|----------------------|---|-----------------------------------|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | L.g. CIDB, DOSIT | L.g. 150, AFT Standard | |
| Project Manager | | Min ten (10) years experience in managing similar scope of services | Proper office setup | | | | | |
| Lead Engineers | engineering discipline, preferably Naval Architecture/ Marine Engineering/ Mechanical Engineering/ Structural/Riser | 5 years experience in Oil and Gas business with a minimum of 3 years of operation/design/ fabrication/ conversion of Floating Offshore Facilities e.g.: FSO, FPSO, FPS, TLP, Spar, Semisub, etc | | | | | | |

Engineering, Construction & Projects (EC&P)
Integrated EPC/EPCC/EPCIC
Offshore - Mobile Production Facilities (MOPU - EPC/EPCC/EPCIC) Work Category: 15161200S Provision to perform Engineering, Procurement, Fabrication, Installation, Commissioning and Start-Up the facilities for Mobile Offshore Facilities which includes new-built/conversion/refurbishment/supply/ operation/masuch as but not limited to MOPU, MODU, MOPSU and MOAB

Work Category's Description:

Mode of Operation: Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|------------------------------------|--|---|--------------------------|-------------------------|--|---|----------------------------------|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO ARI Standard | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. 0.00, 00011 | E.g. ISO, API Standard | | |
| Company/ Principal:Project Manager | Bachelor Degree in Engineering | Min ten (10) years experience in managing similar scope of services | Proper office setup | | Principal to have at least 10 years experience in Oil and Gas business with minimum of 5 years of proven track record in Mobile Offshore Facilities business | | | | |
| Company/ Principal: Lead Engineers | engineering discipline, preferably Naval Architecture/ Marine Engineering/ Mechanical Engineering/ Structural/Riser | Syears experience in Oll and Gas business with a minimum of 3 years of operation/design/fabrications oroversion of Nebible Offshore Facilities e.g.: MOPU, MODU, MOPSU, MOAB, and etc. | | | | | | | |

| Work Category: | 15161200S | Engineering, Construction & Projects (EC&P) Integrated EPC/EPC/CEPCIC Offshore - Mobile Production Facilities (MOPU - EPC/EPC/CEPCIC) |
|------------------------------|---|---|
| Work Category's Description: | Provision to perform Engineering, such as but not limited to MOPU, I | Procurement, Fabrication, Installation, Commissioning and Start-Up the facilities for Mobile Offshore Facilities which includes new-built/conversion/refurbishment/supply/ operation/maintenance I/ODU, MOPSU, MOAB, etc. |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-----------------|--|---|--|-------------------------|----------------------|---|-----------------------------------|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | Lig. Warehouse, Bookyara | E.g. 10015 | | | E.g. 100; At 1 Standard | | |
| Project Manager | Bachelor Degree in Engineering | Min ten (10) years experience in managing similar scope of services | Proper office setup | | | | | | |
| Lead Engineers | Bachelor Degree in any relevent engineering discipline, perferably in the perfect of the perfect of the perfect of perfect perfect of the perfect of Engineering Mechanical Engineering Structural/Riser Engineering Pipeline Engineering. Master is preferred. | System sopretince in Oil and Gas business with a minimum of 3 years of operation/design/fabrications onversion of Nobile Offshore Facilities e.g.: MOPU, MODU, MOPSU, MOAB, and etc. | | | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Integrated EPC/EPCIC/EPCIC

15161400S
Onshore Facilities

Work Category's Description:
Provision to perform Engineering, Procurement, Construction, Installation, Commissioning and Start-Up for integrated construction work including but not limited to mechanical, instrumentation, electrical, structural and civil work.
Typical onehore facilities such as but not limited to terminal, gas processing plant and tank farm

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyard | L.g. roots | | E.g. CIDB, DOSH | L.g. 150, Art Standard | | | | |
| | | | | | | CIDB - related M/E category | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) |
|------------------------------|---------------------------------------|---|
| | | Integrated EPC/EPCIC |
| | 15161500S | Onshore Pipeline |
| | | |
| Work Category's Description: | Provision of labor, material, equipme | ent, services and facilities for onshore general pipeline construction and installation |

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| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|--|---------------------------|---|-----------------------------------|--|------------------------|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | L.g. Walellouse, Dockyalu | L.g. Tools | | L.g. CIDB, DOSI1 | L.g. 150, AFT Standard | | |
| | | | | | | CIDB – Category CE DOSH registered as Pipeline Installer | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) |
|------------------------------|--------------------------------------|---|
| | | Offshore Transportation & Installation |
| | 15171000S | Cable & Umbilical |
| Work Category's Description: | The provision of PMT, transportation | on & installation engineering, procedures, cable & umbilical laying marine spread, inclusive of construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV, |

consumables and other installation

Mode of Operation: Agent

MINIMALM TECHNICAL DECILIDEMENT

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|--|--|---|--|--|---|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Cable lay barge/vessel (Owned by principal) 2. Construction Equipment (Owned/Leased) | Principal Minimum 5 years in managing & executing offshore construction | | |
| Construction/ Installation/ Engineering Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|---|
| | Offshore Transportation & Installation |
| 15171000S | Cable & Umbilical |
| | |

Work Category's Description:
The provision of PMT, transportation & installation engineering, procedures, cable & umbilical laying marine spread, inclusive of construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV, consumables and other installation and pre-commissioning

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|--|--|---|--|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Cable lay barge/vessel (Owned/ Leased) 2. Construction Equipment (Owned /Leased) | | | |
| Construction / Installation / Engineering Manager | Degree / Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA /QC Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree / Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Fixed Structure
Floatover/Other Methods Work Category: 15171110S

The provision of PMT, transportation & installation engineering, procedures, floatover bargelvessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV and other installation aids required for offshore installation Work Category's Description:

Mode of Operation: Agent

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|--|--|---|--|---|---|---|-----------------------------------|
| B. character | Key Personnel Qualification | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | | Experience | | | | | |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Floatover barge/vessel (Owned by principal) 2. Construction Equipment (Owned /Leased) | Principal to have minimum 5 years in managing & executing offshore construction | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Fixed Structure
Floatover/Other Methods Work Category: 15171110S

The provision of PMT, transportation & installation engineering, procedures, floatover bargelvessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV and other installation aids required for offshore installation Work Category's Description:

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|---|--|-----------------|---|----------------------|---|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree/Diploma in engineering | Experience Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | List of: 1. Floatover barge/vessel (Owned/ Leased) 2. Construction Equipment (Owned/Leased) | | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Engineering, Construction & Projects (EC&P) Offshore Transportation & Installation Fixed Structure Lifting Method - Dynamic Positioning Vessel Work Category: 15171111S

The provision of PMT, transportation & installation engineering, procedures, DP demick bargelvessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, heavy lift rigging, piling, grouting, survey & positioning, ROV and other installation aids required for offshore installation Work Category's Description:

Mode of Operation:

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|--|---|--|--|---|---|-----------------------------------|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Lifting DP Vessel (Owned by principal) 2. Construction Equipment (Owned /Leased) | Principal to have minimum 5 years in managing & executing offshore construction | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Fixed Structure
Lifting Method - Dynamic Positioning Vessel Work Category: 15171111S

The provision of PMT, transportation & installation engineering, procedures, DP demick bargelvessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, heavy lift rigging, piling, grouting, survey & positioning, ROV and other installation aids required for offshore installation Work Category's Description:

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|--|--|---|------------------------------|---|-----------------------------------|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | | | | | |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Lifting DP Vessel (Owned //Leased) 2. Construction Equipment (Owned //Leased) | | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Fixed Structure
15171112S Lifting Method - Non Dynamic Positioning Vessel

Work Category's Description:
The provision of PMT, transportation & installation engineering, procedures, derrick barge/vessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, heavy lift rigging, piling, grouting, survey & positioning, ROV and other installation add required for offshore installation

Mode of Operation: Agent

| | | | MINIMUM TECHNIC | MINIMUM TECHNICAL REQUIREMENT | | | | | |
|--|--|---|--|---|---|-----------------------------------|--------------|--|--|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | | 3 | | ğ . , | 3 11, | | |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Derrick barge/vessel (Owned by principal) 2. Construction Equipment (Owned /Leased) | Principal to have minimum 5 years in managing & executing offshore construction | | | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Fixed Structure
15171112S Lifting Method - Non Dynamic Positioning Vessel

Work Calegory's Description:
The provision of PMT, transportation & installation engineering, procedures, derrick bargelvessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, heavy lift rigging, piling, grouting, survey & positioning, ROV and other installation aids required for offshore installation

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|--|--|---|--|--|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | L.g. Walellouse, Dockyalu | E.g. 100is | | L.g. CIDB, DOSIT | L.g. 150, Art Standard |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Derrick barge/vessel (Owned/Leased) 2. Construction Equipment (Owned/Leased) | | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Pipeline & Cable
15171210S Pipelay Conventional Method ('S' and/or 'J' Lay Method)

Work Category's Description:
The provision of PMT, transportation & installation engineering, procedures (including welding), pipeline installation bargevessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV, field joint coating, NDT, consumables and other installation aids required for offshore installation and pre-commissioning

Mode of Operation: Agent

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|--|---|------------------------------|---|---|---|-----------------------------------|
| Designation | Key Personnel Designation Qualiffication Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Pipeline Installation barge/vessel (Owned by principal) 2. Construction Equipment (Owned /Leased) | Principal to have minimum 5 years in managing & executing offshore construction | | |
| Construction/ Installation/ Engineering Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Pipeline & Cable
Pipelay Conventional Method ('S' and/or 'J' Lay Method) Work Category: 151712108

The provision of PMT, transportation & installation engineering, procedures (including welding), pipeline installation bargelvessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV, field joint coating, NDT, consumables and other installation aids required for offshore installation and pre-commissioning Work Category's Description:

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|--|---|--|--|----------------------|---|-----------------------------------|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree/Diploma in engineering | | Proper & Manned Office Setup | List of: 1. Pipeline Installation barge/ vessel (Owned/Leased) 2. Construction Equipment (Owned /Leased) | | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Pipeline & Cable
15171211S Tow, Reeling, Flexible & Other Methods

Work Category's Description:
The provision of PMT, transportation & installation engineering, procedures (including welding), construction marine spread, pipe stringing facilities inclusive of construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV, field joint coating, NDT, consumables and other installation aids required for offshore installation and pre-commissioning

Mode of Operation: Agent

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|--|---|--|--|---|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Pipelay barge/vessel or construction vessel (Owned by principal) 2. Construction Equipment (Owned /Leased) | Principal to have minimum 5 years in managing & executing offshore construction | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Engineering, Construction & Projects (EC&P)
Offshore Transportation & Installation
Pipeline & Cable
Tow, Reeling, Flexible & Other Methods Work Category: 15171211S

The provision of PMT, transportation & installation engineering, procedures (including welding), construction marine spread, pipe stringing facilities inclusive of construction equipment, diving spread, qualified personnel, rigging, survey & positioning, ROV, field joint coating, NDT, consumables and other installation aids required for offshore installation and pre-commissioning Work Category's Description:

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|---|---|------------------------------|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Pipelay barge/vessel or construction vessel (Owned/Leased) 2. Construction Equipment (Owned /Leased) | | | |
| Construction/ Installation/ Engineering Manager | | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | - | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P | |
|----------------|--|--|
| | Offshore Transportation & Installation | |
| 15171300S | SBM & Subsea Structure | |
| | | |

Work Category's Description:
The provision of PMT, transportation & installation engineering, procedure positioning, ROV and other installation aids required for offshore installation.

Mode of Operation: Age

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|--|--|---|-------------------------------------|--|---|-----------------------------------|--|
| | Key Personnel | | E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | = | | g, | |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Offshore Construction barge/vessel (Owned by principal) 2. Construction Equipment (Owned /Leased) | Principal to have minimum 5 years in managing & executing offshore construction | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

| Work Category: | | Engineering, Construction & Projects (EC&P) |
|----------------|-----------|---|
| | | Offshore Transportation & Installation |
| | 15171300S | SBM & Subsea Structure |
| | | |

Work Category's Description:

The provision of PMT, transportation & installation engineering, procedures, offshore construction barge/vessel inclusive of marine spread, construction equipment, diving spread, qualified personnel, rigging, piling, survey & positioning, ROV and other installation aids required for offshore installation

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|--|--|---|------------------------------|---|-----------------------------------|------------------|------------------------|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | | E.g. 10015 | | E.g. 6122, 20011 | E.g. 150, Art Standard |
| Project Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | Proper & Manned Office Setup | List of: 1. Offshore Construction barge/ vessel (Owned/Leased) 2. Construction Equipment (Owned /Leased) | | | |
| Construction/ Installation/ Engineering Manager | Degree/Diploma in engineering | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| QA/QC Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |
| HSE Manager | Degree/Diploma Or Relevant Certificate | Minimum 7 exp. years in Oil & Gas Industry with minimum 2 years of exp. in similar position | | | | | |

Engineering, Construction & Projects (EC&P)
Fabrication & Construction
Onshore - Facilities Fabrication
Major Fabrication Work Category: 15141610S Provision to perform Construction for integrated construction work including but not limited to mechanical, instrumentation, electrical, structural and civil work. Typical onshore facilities such as but not limited to terminal, gas processing plant and tank farm

Work Category's Description:

Self-operated

Mode of Operation:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyard | E.g. 10015 | | 2.g. 3.2B, D0311 | E.g. 100, AFI Standard | | | | |
| | | | | | | CIDB - related M/E category | | | | | |

Work Category: Engineering, Construction & Projects (EC&P)
Fabrication & Construction
15141700S Onshore - Pipeline

Work Category's Description: Provision of labor, material, equipment, services and facilities for onshore general pipeline construction

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|---------------------------|------------|---|--|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Walellouse, Dockyalu | L.g. 100is | | L.g. CIDB, DOSI1 | L.g. 150, AFT Standard | | | | |
| | | | | | | CIDB – Category CE DOSH registered as Pipeline Installer | | | | | |

| Work Category: | Engineering, Construction & Projects (EC&P) |
|----------------|---|
| | Fabrication & Construction |
| 15141800S | Service Station Construction |
| | |

Work Category's Description: The provision of engineering, manpower, materials, equipment, services, project management and facilities for construction of service station and associated infrastructure

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--|-------------------------|----------------------|--|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Lig. Warehouse, Bookyara | E.g. 10015 | | | g , i otaliaara | | | | |
| | | | | | | 1. CIDB B02 or B04; Grade G3 & above 2. CIDB M12; Grade G3 & above | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Fabrication & Construction

15142100S

Tank/Tank Farms

Work Category's Description:

To design, supply, deliver, install and test of tank/tank farms

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--|-------------------------|----------------------|---|-----------------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Waterlouse, Dockyaru | L.g. 100is | | E.g. CIDB, DOSIT | L.g. 150, Art Standard | | | | | |
| | | | | | | CIDB – related M category | | | | | | |

Work Category:

Engineering, Construction & Projects (EC&P)
Hook-up & Commissioning

15151100S
Hook-Up & Commissioning of Offshore Facilities

Work Category's Description:
The provision of mangower, materials, consumables, equipment and services necessary for hook-up & commissioning such as but not limited to workpack development, onshore prefabrication, onshore testing & precommissioning and marine spreads

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--|-------------------------|----------------------|---|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | L.g. Walellouse, Dockyaru | L.g. roots | | E.g. CIDB, DOSIT | E.g. 150, Art Standard | | | | |
| | | | | | | CIDB - Category CE15 | | | | | |

Work Category General Equipment, Maintenance & Spares Equipment Chemical Cleaning 16120000S

Provision of expert advice, labour, equipment and chemical for equipment chemical cleaning services and post cleaning services such as but not limited to passivation and handling of waste Work Category's Description :

Agent Mode of Operation

| | | | MINIMUM TEC | HNICAL REQUIREMENT | | | |
|---------------------------------|---|--|--------------------------|--|---|--|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Engineer | Degree in any engineering discipline | Minimum of 5 years experience in chemical cleaning | office setup | Equipment 1. Pump 2. Retention Tank 3. Hoses | Principal to have minimum of 10 years in providing chemical cleaning and minimum 15 proven track record in chemical cleaning | Business License from Local Authority | |
| Site Supervisor / Technician | Diploma in any field of engineering | Minimum of 3 years experience in chemical cleaning and able to conduct full range of chemical analysis require during chemical cleaning exercise | | Corrosion Coupon Holder) 7. Tools kit for lab test (e.g. pH meter, conductivity, iron and etc) | | | |

General Equipment, Maintenance & Spares Heating, Ventilating & Air Conditioning (HVAC) Services Work Category 16150000S

The provision of manpower, materials, consumables, equipment and facilities necessary for inspection, repair and maintenance of Heating Ventilation Air Conditioning (HVAC) & Split Unit Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------|---|---|--------------------------|---|----------------------|---|-----------------------------------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | | | | | | |
| Project Engineer | | | workshop | Waterjet /hydrojet Air compressor Access to lifting equipment | | | | | | | |
| Site Supervisor | Diploma in Mechanical Engineering Or Certificate in related field | 5 years experience in HVAC maintenance & repair | | 4. Hand tools | | | | | | | |

General Equipment, Maintenance & Spares Heating, Ventilation & Air Conditioning (HVAC) Equipment & Spares Work Category: 16160000P

Work Category's Description: The provision of labor, materials, consumables, equipment and facilities necessary for repair, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of secured voice and data communication network

Mode of Operation: Assembler

| | | | MINIMUM TEC | HNICAL REQUIREMENT | | | |
|---------------------|--|--|---|---|----------------------|---|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | - | | - | |
| Project Manager | Degree in Mechanical /Electrical Engineering Or Diploma in Mechanical / Electrical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard/ Assembling facilities | Litting Facilities (i.e. Overhead Crane, forklift) CAD Software Access to cutting & bending machine Access to testing facilities (e.g. smoke generator, pressure test for refrigeration piping, duct work & etc.) | | Susiness License from local authority CIDB – M01 | |
| Production Manager | Degree in any Engineering field Or Diploma in Mechanical / Electrical Engineering | Minimum 5 years experience in HVAC assembling Or Minimum 7 years in HVAC assembling | | | | | |
| Engineering Manager | Degree in Mechanical /Electrical Engineering | Minimum 5 years experience in HVAC design | | | | | |
| Design Engineer | Degree in Mechanical /Electrical Engineering | Minimum 3 years experience in HVAC design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

General Equipment, Maintenance & Spares Machining & Fabrication Workshop In-situ Machining Work Category 16191000S

The provision of labour, materials, consumables, equipments and facilities necessary for in-situ machining (inclusive of drilling, grinding, cutting, shaping, milling, turning, balancing) Work Category's Description

| | | | MINIMUM TEC | HNICAL REQUIREMENT | | | |
|-------------|--|--|--------------------------|--|----------------------|----------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Supervisor | SPM Or certificate in related field | | setup | Drilling, grinding, cutting, shaping, milling, turning equipment In-situ flange | | | |
| Machinist | SPM Or certificate in related field | 3 years experience in in-situ machining and workshop | | machining equipment valve lapping machine "Company to provide the list of equipment, quantity, owned/ rent, owner (if rented). | | | |

General Equipment, Maintenance & Spares Machining & Fabrication Workshop Machining Workshop Work Category

16191100S

The provision of labour, materials, consumables, equipments and facilities necessary for machining workshop (inclusive of lathe, bending, drilling, grinding, cutting, shaping, milling, turning, balancing) Work Category's Description

| | | | MINIMUM TEC | HNICAL REQUIREMENT | | | |
|-------------|--|--|---------------------------------|--|----------------------|----------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Supervisor | SPM Or certificate in related field | 3 years experience in machining and workshop fabrication | setup Mechanical Maintenance | lathe, bending, drilling, grinding, cutting, shaping, milling, turning, blasting, welding | | | |
| Machinist | SPM Or certificate in related field | 3 years experience in machining and workshop fabrication | | equipment *Company to provide the list of equipment, quantity, owned/ rent, owner (# rented). | | | |

General Equipment, Maintenance & Spares Service Station Equipment Fuel Dispenser & Accessories Work Category

16241000P

Work Category's Description

To supply, deliver, install, test and commission service station fuel dispenser & accessories such as but not limited to nozzle, hose, visi gauge, breakaway coupling, swivel joint, submersible turbine pump, leak detector, automatic tank gauging, outdoor payment terminal, digital screen display, lighting surge protector, pump controller and shear valves

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|---|-----------------------------------|--------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Eig. Haronouse, Dookyara | 2.g. 100.0 | | 2.g. 0.55, 500.1 | Lig. 100, 7.1 Totalidard | | | | | |
| | | | | | Principal to have minimum 5 years experience in petrol station equipment , manufacturing and maintenance | | | | | | | |

General Equipment, Maintenance & Spares Service Station Equipment Underground Flexible Fuel Piping System Work Category

16241300P

To supply, deliver, install, test and commission underground flexible fuel piping system and accessories such as but not limited to tank sump and cover, manhole cover and lifting handle, monitoring test well and dispenser sump Work Category's Description

Mode of Operation Agent

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|--|--------------------------|----------------------|---|-----------------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | L.g. 0100, 00011 | Ligi ioo, Totalidard | | | | |
| | | | | | Principal to have minimum 5 years experience in manufacturing of underground flexible fuel piping system | | | | | |

General Equipment, Maintenance & Spares Service Station Equipment Underground Storage Tank & Accessories Work Category

16241400P

To supply, deliver, install, test and commission underground storage tank and accessories such as but not limited to float vent valve, manhole cover, dipping pipe, filling pipe, monitoring test well and vacuum gauge Work Category's Description

Mode of Operation Agent

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|------------|--|-------------------------|---|---|-----------------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | 2.g. 100.0 | | 2.g. 0.22, 2001. | zigi 100, xi rotandara | | | |
| | | | | | Principal to have minimum 5 years experience in manufacturing of storage tank | | | | | |

General Equipment, Maintenance & Spares Service Station Equipment Underground Storage Tank & Accessories Work Category

16241400P

To supply, deliver, install, test and commission underground storage tank & accessories (e.g. float vent valve, manhole cover, dipping pipe, filling pipe, monitoring test well, vacuum gauge, etc.) Work Category's Description

Mode of Operation Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------|---|---|---|--|----------------------|---|-----------------------------------|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Project Manager | Degree in Mechanical Or Civil Engineering | Minimum 5 years experience in managing civil construction work and/or underground storage tank facilities. | Manned and permanent office setup Fabrication Yard/ Fabrication & Assembling facilities Warehouse | Lifting Facilitates (i.e. Overhead Crane, forklift) Design software e.g. CAD 3.Rolling, cutting & bending machine 4.Welding facilities | | Business License from local authority | | | | |
| Production Manager | Degree in Mechanical Engineering | Minimum 3 years experience in manufacturing of underground storage tank facilities. | | 5-Access to blasting & painting facilities / services 6. Testing facilities (e.g. pressure test, hydrotest and etc.) | | | | | | |
| QA/QC Engineer | Degree in Mechanical Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |
| Project Engineer | Degree in Mechanical Or Civil Engineering field | Minimum 2 years experience in petrol station construction and/or underground storage tank facilities. | | | | | | | | |
| Technician | Trained and certified | N/A | | | | | | | | |

General Equipment, Maintenance & Spares Spare Parts Aviation Filters (Jet A1 & Avgas) Work Category

16261000P

Work Category's Description To supply and deliver aviation filters such as but not limited to microfilter, coalescer, separator, clay filter and filter monitor

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|--|-----------------|------------------------|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | E.g. Tools | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 10 years experience in aviation filters related works Company to have minimum 3 years experience in aviation filters related works | | | | | |

General Equipment, Maintenance & Spares Spare Parts Fluid/Turbo Coupling Work Category

16261500P

Work Category's Description To supply and deliver Fluid/Turbo Coupling component and parts

Mode of Operation

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|------------|--------------------------|------------|--|----------------------------|------------------------|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | E.g. Tools | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Minimum 3 years experience in O&G mechanical rotating related works | | | | | |

General Equipment, Maintenance & Spares Spare Parts Fluid/Turbo Coupling Work Category

16261500P

Work Category's Description To supply and deliver Fluid/Turbo Coupling component and parts

Mode of Operation Assembler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------------|--|--|--|--|----------------------|--|-----------------------------------|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years | Manned and permanent office setup Assembling facility Access to testing facility | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | | | | |
| Engineer | Degree in Mechanical Engineering or related engineering field | Minimum 5 years experience in mechanical rotating related works Trained and certified from Principal | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Z.Trained and certified from Principal | | | | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in mechanical rotating related works | | | | | | | | |

General Equipment, Maintenance & Spares Gas Cylinder Services LPG Reticulation System Work Category

16141200S

Work Category's Description The provision of manpower, materials, equipment and facilities necessary for installation, requalification and maintenance of LPG bulk tank facilities

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|----------------------------|--|------------------------|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | | Suruhanjaya Tenaga (ST) or DOSH – Kontraktor Talian Paip (Gas) for Company in Semenanjung Malaysia and Sabah or Certificate of Electrical Installation Contractor (EIC) for Company Sarawak | | | | |

General Equipment, Maintenance & Spares Gas Cylinder Services LPG Reticulation System Work Category

16141200S

Work Category's Description The provision of manpower, materials, equipment and facilities necessary for installation, requalification and maintenance of LPG bulk tank facilities

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|----------------------------|--|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | Suruhanjaya Tenaga (ST) or DOSH – Kontraktor Talian Paip (Gas) for Company in Semenanjung Malaysia and Sabah or Certificate of Electrical Installation Contractor (EIC) for Company Sarawak | | | | | | |

General Equipment, Maintenance & Spares Removal & Disposal Services Removal & Disposal Of Metal Scrap Work Category

16231100S

Work Category's Description The provision of manpower, equipment, services, treatment, characterization, transportation & disposal of metal scrap

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|---|--|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | Business license applicable to the scope of work issued by relevant authority (e.g. PDRM, local municipal / city council) | | | | | | |

General Equipment, Maintenance & Spares Spare Parts Specialised Connectors & Joints Work Category

16262100P

To supply and deliver Welded or Non-welded Specialised Connectors and Joints such as clamp type connectors, compact flanges, swivels flanges, hammer lug, swage connector and joints Work Category's Description

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|----------------------------|--|------------------------|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | 3rd party type approval (DNV, etc) "Require 3rd party approval due to product not listed in ASME or API then manufacturer need to design and inspected by 3rd party. | | | | | |

Work Category

Geological & Geophysical (G&G)
G&G Consultancy Services
Geological Feasibility/Prospecting/Reconnaissance Study 17101000S

The provision of personnel and equipment to conduct study and propose optimal solution to acquire and process geological data such as but not limited to surface geochemistry and time Lapse Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--|-------------------------------|--|-------------------------|---|---|-----------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | |
| AGENT Business Development Manager | Degree in any discipline | Minimum 3 years experience in oil & gas exploration & production | · | Coring equipment/Geological tools/Lab equipment | PRINCIPAL Minimum 5 years experience in geological feasibility / prospecting / reconnaissance Study | | | | | |

Work Category

Geological & Geophysical (G&G)
G&G Consultancy Services
Geological Feasibility/Prospecting/Reconnaissance Study 17101000S

The provision of personnel & equipment to conduct study and propose optimal solution to acquire and process geological data. (e.g. surface geochemistry, Time Lapse, etc.) Work Category's Description

Self Operated Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--------------------------|-------------------------------|---|----------------------|---|-----------------------------------|-----------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 74 10tandara | | | | | |
| Geologist / Geophysicist | | Minimum 5 years in geological feasibility / prospecting / reconnaissance Study | | Coring equipment / Geological tools / Lab equipment geological software & hardware | | | | | | | | |

Geological & Geophysical (G&G) G&G Consultancy Services Geophysical Feasibility Study Work Category

17101100S

The provision of personnel and equipment to conduct study and propose optimal solution to acquire and process geophysical data such as but not limited to time-lapse, multi-component, reservoir characterization and illumination Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------------|--|--|-----------------|-----------------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, AFT Standard | | | | | |
| AGENT Business Development Manager | , , | Minimum 3 years experience in oil & gas exploration & production | | Geophysical modeling, interpretation and analysis equipment and software | PRINCIPAL Minimum 3 years experience or have at least 3 projects successfully completed in geophysical feasibility study | | | | | | | |

Geological & Geophysical (G&G) G&G Consultancy Services Geophysical Feasibility Study Work Category

17101100S

The provision of personnel & equipment to conduct study and propose optimal solution to acquire and process geophysical data. (e.g. Time-lapse, multi-component, reservoir characterization, illumination, etc.) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------|-------------------------------|--|---------------------------------------|--|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, AFT Standard | | | | |
| Technical Manager | | Minimum 3 years experience in oil & gas exploration & production | ' | Geophysical modeling, interpretation and analysis equipment and software | | | | | | | |

Work Category : Geological & Geophysical (G&G)
G&G Consultancy Services
17101300S Integrated Full Field Review

Work Category's Description : The provision to conduct full field review study

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------|--|---|----------|---|----------------------|-------------------------------|-----------------------------------|--|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 100is | | E.g. CIDB, DOSH | L.g. 130, AFT Standard | | | | |
| Petrophysicist | Degree in Geology / Petroleum Engineering | Minimum 5 years in formation evaluation | | Workstation and geological & modelling software | | | | | | | |
| Geologist (Geomodeller) | Degree in Geology | Minimum 5 years in geological modelling | | ookwaro | | | | | | | |
| Reservoir Engineer | Degree in Petroleum Engineering | Minimum 5 years in reservoir engineering | | | | | | | | | |
| Geophysicist | Degree in Geophysic / Geology | Minimum 5 years in geophysical interpretation | | | | | | | | | |

Work Category Geological & Geophysical (G&G) General Geomatics Survey MetOcean & Hydrographic Survey 17111100S

The provision of personnel, equipments and services for Meteorological Survey (including analysis, study and advice to provide weather forecast report and studies), Oceanographic Survey (including analysis, study and advice to collect and analyze metocean data) and Hydrographic Survey to map seabed topography Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---|---|--|---|--|--|--|-----------------------------------|--|--|--|--|--|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | | | |
| AGENT Business Development Manager PRINCIPAL | Degree in any discipline Degree in Sc/Eng | Minimum 3 years experience in oil & gas exploration & production Minimum 5 years | AGENT Manned office setup PRINCIPAL Processing centre | PRINCIPAL Data receiver/measuring instruments, processors & interpretation system/software | PRINCIPAL Principal to have minimum 5 years experience in Meteorogical Survey/Oceanographic Survey/Hydrographical Survey | - | | | | | | | | | |
| Meteorologist/Oceanogra pher/Hydrographer | | experience in providing related services e.g. weather forecast and meteorological studies, metocean consultancy work and studies, hydrographic studies | | | | | | | | | | | | | |

Work Category : Geological & Geophysical (G&G)
General Geomatics Survey

17111100S MetOcean & Hydrographic Survey

Work Category's Description : The provision of personnel, equipments & services for Meteorological Survey (including analysis, study and advice to provide weather forecast report and studies), Oceanographic Survey (including analysis, study and advice to collect and analyze metocean data) and Hydrographic Survey to map seabed topography

Mode of Operation : Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--|-------------------------------|--|-----------------------------|--|----------------------|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Meteorologist/Oceanogra pher/Hydrographer | - | Minimum 5 years experience in providing related services e.g. weather forecast and meteorological studies, metocean consultancy work and studies, hydrographic studies | | Data receiver/measuring instruments, processors & interpretation system/software | | | | | | | |

Work Category : Geological & Geophysical (G&G)
General Geophysical Data Services
17121000S Geography Information System (GIS)

Work Category's Description : Services related to acquisition, processing, managing, analyze and monitoring E&P data and E&P GIS application development

Mode of Operation : Self-operated

| | MINIMUM TECHNICAL REQUIREMENT Facilities External Body | | | | | | | | | | |
|--|--|--|-------------------------------|------------------------------------|----------------------|--|-----------------------------------|--|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Project Manager | Degree in Land Surveying/ Geomatics/ Geoinformation/ remote sensing | Minimum 7 years experience in O&G exploration & production | Dockyard Manned office setup | Related GIS Software & Hardware | | y - , | | | | | |
| Team Leader | | Minimum 5 years experience in O&G exploration & production | | | | | | | | | |
| GIS Specialist / Database Administrator | Degree in Land Surveying/ Geomatics/ Geoinformation/ remote sensing | Minimum 3 years experience in O&G exploration & production | | | | | | | | | |
| Programmer | Degree in Geoinformation/ Computer Science/ Computer Engineering | Minimum 3 years experience in O&G exploration & production | | | | | | | | | |

Geological & Geophysical (G&G) General Geophysical Data Services Geological & Geophysical Data Storage Work Category

17121100S

The provision of services for geological & geophysical data storage such as but not limited to core, fluid, cutting sample, seismic, navigation, gravity, magnetic, and electromagnetic Work Category's Description

Self Operated Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|----------------------|-------------------------------|--------------------------------|---|--|-------------------------------|-----------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai Fotandard | | | | | |
| Warehouse supervisor | | 5 years relevant experience | (temperature & humidity) | Fire & Flood protection system, tape management database | | | | | | | | |

Work Category Geological & Geophysical (G&G) General Geophysical Data Services Other Geological & Geophysical Services

17121200S

Work Category's Description $The \ provision \ of \ services \ for \ tape \ copying, \ digitising, \ plotting, \ formatting, \ scanning, \ vector ising, \ \& \ etc.$

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--------------------------------|-------------------------|---|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | | |
| Supervisor | | 5 years relevant experience | Malaysia | Tape recovery equipment, tape-copying system, plotter, analog-to-digital conversion hardware & software | | | | | | | | |

Work Category : Geological & Geophysical (G&G)
17130000S Geological Analysis While Drilling

Work Category's Description : The provision of geological analysis while drilling such as but not limited to biostratigraphy, geochemistry and sedimentology

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------|----------------------|--|-----------------------------------|---|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | _ | | E.g. CIDB, DOSH | _ | | | | | | |
| AGENT Business Development Manager | , , | Minimum 3 years experience in oil & gas exploration & production | | | PRINCIPAL Minimum 2 years experience in Geological Analysis While Drilling | | | | | | | | |

Work Category : Geological & Geophysical (G&G)
17130000S Geological Analysis While Drilling

Work Category's Description : The provision of geological analysis while drilling (e.g. biostratigraphy, geochemistry, sedimentology, etc.)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---|-------------------------------|---------------------------------------|-------------------------|--|--|-----------------------------------|--|--|--|--|--|--|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | _ | | E.g. CIDB, DOSH | | | | | | | |
| Geoscientist | | Minimum 3 years in wellsite operation | | 1.Geological software & hardware 2.Logging analysis equipment | | | | | | | | | |

Geological & Geophysical (G&G) Geology Modeling Services Geochemistry & Basin Work Category

17151000S

Work Category's Description The provision of geochemical & basin modelling services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--|-------------------------------|--|--|---|--|-----------------------------------|------------------------|--|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools Co | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 100is | | E.g. CIDB, DOSH | L.g. 150, Art Standard | | | | | | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | | Geochem & basin modelling software & hardware | PRINCIPAL Minimum 5 years experience in geochem & basin geology modelling / analyses | | | | | | | | |

Geological & Geophysical (G&G) Geology Modeling Services Geochemistry & Basin Work Category

17151000S

Work Category's Description The provision of geochemical & basin modelling services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|---|---------------------------------------|---|-------------------------------|-----------------------------------|------------------------|--|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, Art Standard | | | | | | |
| Geochemist | Chemistry | Minimum 5 years in geochemistry & basin modelling and geochem & basin modelling application | | Geochem & basin modelling software & hardware | | | | | | | | | |

Geological & Geophysical (G&G) Geology Modeling Services Pore Pressure Prediction Work Category

17151100S

Work Category's Description The provision of pore pressure prediction modelling

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|--|----------------------|---|--|-----------------|--------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otalidala | | | | | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | ' | Pore pressure modelling software & hardware | PRINCIPAL Minimum 5 years experience in pore pressure modelling / analyses | | | | | | | |

Geological & Geophysical (G&G) Geology Modeling Services Pore Pressure Prediction Work Category

17151100S

Work Category's Description The provision of pore pressure prediction modelling

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|-----------------------------|-------------------------------|---|---------------------------------------|--|--|-----------------------------------|-------------------------|--|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otandara | | | | | | |
| Geologist / Geophysicist Or | Or | Minimum 5 years in pore pressure analysis modelling and pore pressure analysis | | Pore Pressure modelling software & hardware | | | | | | | | | |
| Petroleum Engineer | | modelling application | | | | | | | | | | | |

Geological & Geophysical (G&G) Geology Modeling Services Reservoir Work Category

17151200S

The provision of reservoir modelling services (i.e. static and dynamic) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------|----------------------|--|-----------------------------------|---------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 7 ii 1 olandaru | | | | | | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | | | PRINCIPAL Minimum 5 years experience in reservoir modelling / analyses | | | | | | | | |

Geological & Geophysical (G&G) Geology Modeling Services Reservoir Work Category

17151200S

The provision of reservoir modelling services (i.e. static and dynamic) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|----------|---|--|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otandara | | | | | |
| Geomodeller | petroleum engineering | Minimum 5 years in reservoir modelling and reservoir modelling application | | Reservoir modelling software & hardware | | | | | | | | |

Geological & Geophysical (G&G) Geology Modeling Services Structural Geology Work Category

17151300S

The provision of structural geology/geomechanics modelling services such as but not limited to fault seal analysis, regional structural trend and fracture analysis Work Category's Description

Self Operated Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|----------------------|-------------------------------|---|----------------------|--|-----------------------------------|-----------------|--------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otalidara | | | | | | |
| Structural Geologist | | Minimum 5 years in structural geology / geophysics / geomechanics and structural modelling application | Manned office setup | Structural modelling software & hardware | | | | | | | | | |

Geological & Geophysical (G&G) Non-seismic Survey Electromagnetic Data Processing/Reprocessing Work Category

17161000S

Work Category's Description The provision of personnel, equipment & services for electromagnetic data processing/reprocessing and interpretation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--|-------------------------------|--|----------------------|--|-----------------------------------|-----------------|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | | | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | | Electromagnetic processing / reprocessing & interpretation equipment and software | | | | | | | | | |

Work Category

Geological & Geophysical (G&G) Non-seismic Survey Electromagnetic Data Processing/Reprocessing 17161000S

Work Category's Description The provision of personnel, equipment & services for electromagnetic data processing/reprocessing and interpretation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------|-------------------------------|--|----------------------|---|-----------------------------------|-----------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 100is | | E.g. CIDB, DOSH | L.g. 150, AFT Standard | | | | |
| Technical Manager | | Minimum 3 years experience in oil & gas exploration & production | · | Electromagnetic processing / reprocessing & interpretation equipment and software | | | | | | | |

Work Category : Geological & Geophysical (G&G)
Non-seismic Survey

17161100S Electromagnetic Feasibility Study

Work Category's Description : The provision of personnel & equipment to conduct study and propose an optimal survey design to acquire and process electromagnetic data

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------|--|--|-----------------------------------|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 150, AFT Standard | | | | | | |
| AGENT Business Development Manager | , , | Minimum 3 years experience in oil & gas exploration & production | | Electromagnetic modeling & interpretation equipment and software | | | | | | | | | |

Work Category : Geological & Geophysical (G&G)
Non-seismic Survey

17161100S Electromagnetic Feasibility Study

Work Category's Description : The provision of personnel & equipment to conduct study and propose an optimal survey design to acquire and process electromagnetic data

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------|-------------------------------|--|----------------------|--|-----------------------------------|-----------------|----------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools Control | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | g , 1 Otamaara | | | | | |
| Technical Manager | | Minimum 3 years experience in oil & gas exploration & production | ' | Electromagnetic modeling & interpretation equipment and software | | | | | | | | |

Work Category Geological & Geophysical (G&G) Non-seismic Survey Electromagnetic Survey - Land

17161200S

Work Category's Description $Provision \ of \ personnel, \ equipment \ \& \ services \ for \ land \ electromagnetic \ data \ acquisition, \ processing \ and \ interpretation$

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------------|---|--|-------------------------------|-----------------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | g. 100.0 | | E.g. CIDB, DOSH | L.g. 150, Art Standard | | | | | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | | Land electromagnetic acquisition, processing & interpretation equipment | PRINCIPAL Minimum 5 years experience or have at least 5 projects successfully completed in land electromagnetic survey | | | | | | | |

Work Category Geological & Geophysical (G&G) Non-seismic Survey Electromagnetic Survey - Land

17161200S

Work Category's Description $Provision \ of personnel, equipment \& \ services \ for \ land \ electromagnetic \ data \ acquisition, \ processing \ and \ interpretation$

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------|-------------------------------|--|----------------------|---|-----------------------------------|-----------------|--------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools Control | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | 2.g. 100, 74 1 0 tanuara | | | | | |
| Technical Manager | | Minimum 3 years experience in oil & gas exploration & production | ' | Land electromagnetic acquisition, processing & interpretation equipment | | | | | | | | |

Work Category Geological & Geophysical (G&G) Non-seismic Survey Electromagnetic Survey - Marine

17161300S

Work Category's Description $Provision \ of \ personnel, \ equipment \ \& \ services \ for \ marine \ electromagnetic \ data \ acquisition, \ processing \ and \ interpretation$

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | | | | |
| AGENT Business Development Manager | Degree in any discipline | Minimum 3 years experience in oil & gas exploration & production | Manned office setup | | PRINCIPAL Minimum 3 years experience or have at least 3 projects successfully completed in marine electromagnetic survey | | | | | | | | |

Work Category Geological & Geophysical (G&G) Non-seismic Survey Electromagnetic Survey - Marine

17161300S

Work Category's Description $Provision \ of \ personnel, \ equipment \ \& \ services \ for \ marine \ electromagnetic \ data \ acquisition, \ processing \ and \ interpretation$

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------|-------------------------------|--|----------------------|---|-----------------------------------|-----------------|---------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | 2.g. 100, 711 1 0 tanaara | | | | | |
| Technical Manager | | Minimum 3 years experience in oil & gas exploration & production | | Marine electromagnetic acquisition, processing & interpretation equipment | | | | | | | | |

Geological & Geophysical (G&G) Non-seismic Survey Magnetic & Gravity Data Interpretation Work Category

17161400S

Work Category's Description The provision of personnel, equipment & services for magnetic & gravity data processing/reprocessing and interpretation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|---------------|---|---------------------------|---|---|-----------------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, | E.g. Warehouse, Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | _ | | E.g. CIDB, DOSH | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | Manned office setup | processing & interpretation software | Minimum 3 years experience in gravity and magnetic processing & interpretation | | |
| PRINCIPAL Supervisor | ., | Minimum 5 years experience in gravity and magnetic processing & interpretation | Processing centre | | | | |

Geological & Geophysical (G&G) Non-seismic Survey Magnetic & Gravity Data Interpretation Work Category

17161400S

Work Category's Description The provision of personnel, equipment & services for magnetic & gravity data processing/reprocessing and interpretation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------|---------------|---|----------------------|---|-----------------------------------|-----------------|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | Dockyard | g. 10010 | | E.g. CIDB, DOSH | |
| Technical Manager | | Minimum 3 years experience in oil & gas exploration & production | Processing centre | Gravity and magnetic processing & interpretation software | | | |
| Supervisor | | Minimum 5 years experience in gravity and magnetic processing & interpretation | | | | | |

Work Category : Geophysical Services
Non-seismic Survey
17161500S Magnetic & Gravity Survey - Aerial

Work Category's Description : The provision of personnel, equipment & services for aeromagnetic & gravity data acquisition, processing & interpretation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|---|---------------------------------------|-----------------------|---|-----------------------------------|-------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 150, AFI Stalluaru | | | | | |
| AGENT Logistic Coordinator | | | | acquisition equipment | Minimum 5 years experience in gravity & magnetic survey | | | | | | | |
| PRINCIPAL Pilot cum/and party chief | | Minimum 5 years in gravity & magnetic survey | | | | | | | | | | |

Work Category : Geophysical Services
Non-seismic Survey

17161500S Magnetic & Gravity Survey - Aerial

Work Category's Description : The provision of personnel, equipment & services for aeromagnetic & gravity data acquisition, processing & interpretation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------------------|---|---|----------------------|---|-----------------------------------|-----------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | | |
| Logistic Coordinator | SPM or equivalent | Minimum 3 years in oil & gas exploration & production | | Gravity and magnetic acquisition equipment | | | | | | | | |
| Pilot cum/and party chief | Valid commercial pilot licence / Degree in Sc/Eng | Minimum 5 years in gravity & magnetic survey | | | | | | | | | | |

Geological & Geophysical (G&G) Non-seismic Survey Magnetic & Gravity Survey - Land Work Category

17161600S

Provision of personnel, equipments & services for land magnetic & gravity data for G&G interpretation Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|------------------|----------------------------------|--|--|----------------------------|---|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | | | E.g. CIDB, DOSH | |
| AGENT Business Development Manager | Degree in Sc/Eng | 5 years (in upstream activities) | AGENT Office Premise/PC /Office Facilities | | | AGENT Exclusive appointment from principal | |
| PRINCIPAL Sr. Observer/Sr. Navigator/Sr. Engineer/Sr. QC | Degree in Sc/Eng | 5 years (in upstream activities) | | PRINCIPAL Logistic, magnetometer, accelerometer, navigation / positioning & recording system | | PRINCIPAL International Association Geophysical Contractor (IAGC) | |

Geological & Geophysical (G&G) Non-seismic Survey Magnetic & Gravity Survey - Land Work Category

17161600S

Provision of personnel, equipments & services for land magnetic & gravity data for G & G interpretation Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|----------------------------------|-------------------------|--|-------------------------------|--|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, AFT Standard | | | | | |
| Sr. Observer/Sr. Navigator/Sr. Engineer/Sr. QC | Degree in Sc/Eng | 5 years (in upstream activities) | | Logistic, magnetometer, accelerometer, navigation / positioning & recording system | | International Association Geophysical Contractor (IAGC) | | | | | | |

Geological & Geophysical (G&G) Non-seismic Survey Survey Vessel Work Category

17161700S

The provision of Survey Vessel including personnel, designed and equipped to carry out survey at sea for the purpose of hydrography, general oceanography, environmental, etc. Work Category's Description

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|-------------------------------|---|----------------------|--|-----------------------------------|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | | | E.g. CIDB, DOSH | | | | | |
| | | | | 1.One valid exclusive appointment letter from Principal for one year 2.List of vessel | | Principal must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | | | | | |

Geological & Geophysical (G&G) Non-seismic Survey Survey Vessel Work Category

17161700S

The provision of Survey Vessel including personnel, designed and equipped to carry out survey at sea for the purpose of hydrography, general oceanography, environmental, etc. Work Category's Description

Mode of Operation Vessel Operator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---------------|------------|-------------------------------|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, API Standard |
| | | | | 1.Letter of appointment from Owner to operator for each vessel to operate 2.List of vessel | | Vessel Operator must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

Geological & Geophysical (G&G) Non-seismic Survey Survey Vessel Work Category

17161700S

The provision of Survey Vessel including personnel, designed and equipped to carry out survey at sea for the purpose of hydrography, general oceanography, environmental, etc. Work Category's Description

Mode of Operation Vessel Owner Operator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|---|------------------------|---|-------------------------|----------------------|---|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Operational Manager / Technical Manager | Master Mariner or Marine Engineer Unlimited | 5 years in Oil and Gas | Manned Ship Management office setup | 1.List of own vessel | | Vessel from Malaysian Ship Registry 2.Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of International Association of | |

| Work Category | : | | Geological & Geophysical (G&G) |
|---------------|---|-----------|--------------------------------|
| | | | Positioning |
| | | 17171000S | Positioning - Offshore |
| | | | |

Work Category's Description : Provision of personnel, equipment & services to determine the position for drilling, engineering and seismic activities (offshore), Vessel Management System (VMS)

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|----------------|----------------------|---|-------------------------------|---|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment / Machineries E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 7 a 10 tanuar a |
| Survey Manager | equivalents | Minimum 8 years in oil & gas exploration & production (positioning) | 2.Warehouse / Workshop | Navigation / positioning suite, data recording & processing equipment | | International Marine Contractors Association (IMCA) / Oil & Gas Producer Association (OGP) | |
| Sr. Surveyor | equivalents | Minimum 5 years in oil & gas exploration & production (positioning) | | | | , | |
| Sr. Engineer | Instrumentation Eng. | Minimum 5 years in oil & gas exploration & production (positioning) | | | | | |

Work Category's Description : Provision of personnel, equipment & services to determine the position for drilling, engineering and seismic activities (onshore)

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|----------------|----------------------|---|------------------------|--|----------------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | | Equipment / Machineries E.g. Tools | es Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Survey Manager | equivalents | Minimum 8 years in oil & gas exploration & production (positioning) | 2.Warehouse / Workshop | Surveying & positioning equipment, data recording & processing equipment | | | |
| Sr. Surveyor | equivalents | Minimum 5 years in oil & gas exploration & production (positioning) | | | | | |
| Sr. Engineer | Instrumentation Eng. | Minimum 5 years in oil & gas exploration & production (positioning) | | | | | |

Work Category : Geological & Geophysical (G&G)
17180000S Remote Sensing

Work Category's Description : Provision of personnel, equipment & services for acquisition of remote sensing data (satellite, radar images) & services for geological, geophysical & geomatics application

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------|-------------------------------|--------------------------------------|---|------------------------|--|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Equipment / Machineries | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | L.g. 150, AFI Standard | | | | |
| Sr. Geoscientist | | remote sensing | Manned office setup complete with processing facilities | Data processing system | | | | | | | |
| Sr. Data Analyst | | Minimum 5 years in remote sensing | | | | | | | | | |

Work Category Geological & Geophysical (G&G)
Sample Analysis, Preservation, Handling & Transportation
Fluid Sampling Services

17191000S

The provision of routine fluids sample analysis for geochemistry & reservoir fluid studies , PVT, crude, gas & water, and sample handling, storage and transportation of fluid (PVT Fluid Sample) analyzed sample Work Category's Description

Self Operated Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|----------------------|-------------------------------|---|--|-------------------------|----------------------|-----------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | E.g. 150, AFI Stalluaru | | | | |
| Geochemist / Chemist | | Minimum 5 years in fluid sample analysis | Manned office setup Operational Laboratory in Malaysia | Laboratory equipment | | | | | | | |
| Petroleum Engineer | | Minimum 5 years in fluid sample analysis | | | | | | | | | |

Work Category Geological & Geophysical (G&G)
Sample Analysis, Preservation, Handling & Transportation
Rock Sampling Services

17191100S

The provision of routine rock sample analysis for structural geology, geochemistry, biostratigraphy, sedimentology and petrophysical analyses, and sample handling, storage and transportation of rock analysed sample Work Category's Description

Self Operated Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------|----------------------------------|--|--|-------------------------|----------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 150, AFT Standard |
| Geochemist | Degree in Geology / Chemistry | Minimum 5 years in geochemistry | Manned office setup Operational Laboratory in Malaysia | Laboratory equipment | | | |
| Biostratigrapher | Degree in Geology | Minimum 5 years in biostratigraphy | 1 | | | | |
| Sedimentologist | Degree in Geology | Minimum 5 years in sedimentology | | | | | |
| Petrophysicist | Degree in Geology / Physic | Minimum 5 years in formation evaluation | | | | | |

Work Category

Geological & Geophysical (G&G)
Sample Analysis, Preservation, Handling & Transportation
Specialized Sample Analysis

17191200S

 $The provision of specialized sample analysis such as but not limited to fluid inclusion, carbon isotope and {\tt GC/MS/MS} \\$ Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--|-------------------------------|--|---|----------------------|---|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | zigi ioo, za i otanaara | | | | |
| AGENT Business Development Manager | , , | Minimum 3 years experience in oil & gas exploration & production | | Laboratory equipment | PRINCIPAL Minimum 5 years experience in specialized laboratory analyses | | | | | | |

Work Category

Geological & Geophysical (G&G)
Sample Analysis, Preservation, Handling & Transportation
Specialized Sample Analysis

17191200S

The provision of specialized sample analysis (e.g. fluid inclusion, carbon isotope, GC/MS/MS, etc.) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------|-------------------------------|--|---------------------------------------|----------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| Technical Manager | | Minimum 3 years experience in oil & gas exploration & production | Manned office setup | Laboratory equipment | | | | | | | |

Work Category Geological & Geophysical (G&G) Seismic Services G&G Data Interpretation Services

17201000S

Work Category's Description The provision of personnel, equipment & services for G&G data interpretation services $% \left(1\right) =\left(1\right) \left(1\right) \left($

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|---------------|--|------------------------------|--|--|-----------------------------------|------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | 9 | | E.g. CIDB, DOSH | 3 11, 111 |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | AGENT Manned office setup | | | | |
| PRINCIPAL Senior G&G Interpreter | | Minimum 7 years experience in G&G data interpretation | | G&G data interpretation software and hardware | PRINCIPAL Minimum 5 years experience or at least 5 projects successfully completed in G&G data interpretation services | | |

Work Category Geological & Geophysical (G&G) Seismic Services G&G Data Interpretation Services

17201000S

Work Category's Description The provision of personnel, equipment & services for G&G data interpretation services $% \left(1\right) =\left(1\right) \left(1\right) \left($

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|-------------------------------|---|----------------------|--|-----------------------------------|-----------------|--------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools Cor | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | Ligi 100, 7th Totalidard | | | | |
| Senior G&G Interpreter | | Minimum 7 years experience in G&G data interpretation | | G&G data interpretation software and hardware | | | | | | | |

Geological & Geophysical (G&G) Seismic Services G&G Interpretation/Mapping Systems Work Category

17201100S

Work Category's Description The provision of purchase/lease of equipment & maintenance services for G&G Interpretation/mapping systems ${\sf G}$

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|----------------------------------|------------------------------------|---|--------------------------------------|-------------------------|---|-------------------------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otandara | | | | |
| AGENT Software Engineer | Degree in Science / Engineering | | AGENT Manned office setup | | | | | | | | |
| PRINCIPAL Software Specialist | Degree in Science / Engineering | Minimum 5 years in Geological & Geophysical software development & maintenance | PRINCIPAL Software R&D facilities | | PRINCIPAL Minimum 3 years experience in G&G software development | | | | | | |

Geological & Geophysical (G&G) Seismic Services G&G Interpretation/Mapping Systems Work Category

17201100S

Work Category's Description The provision of purchase/lease of equipment & maintenance services for G&G Interpretation/mapping systems

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------|-------------------------------|---|-------------------------|----------------------|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, AFT Standard | | | | |
| Software Specialist | Engineering | Minimum 5 years in Geological & Geophysical software development & maintenance | Software R&D facilities | | | | | | | | |

Geological & Geophysical (G&G) Seismic Services Land Seismic Data Acquisition Work Category

17201200S

Work Category's Description Provision of personnel, equipment & services for 2D & 3D land seismic data acquisition

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------|--|---|--|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 74 Totaliaa u | | | | | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | ' | PRINCIPAL List of land seismic acquisition equipment | Minimum 5 years experience or at least 5 | PRINCIPAL International Association of Geophysical Contractors (IAGC) | | | | | | |

Geological & Geophysical (G&G) Seismic Services Land Seismic Data Acquisition Work Category

17201200S

Work Category's Description Provision of personnel, equipment & services for 2D & 3D land seismic data acquisition

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------|------------------|---|---|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | g. 100.0 | | E.g. CIDB, DOSH | 2.9.100,7.1.10.1.1.1.1 |
| Party Chief | Degree in Sc/Eng | Minimum 7 years experience in land seismic data acquisition | Manned office setup Warehouse (owned/lease) | List of land seismic acquisition equipment | | International Association of Geophysical Contractors (IAGC) | |
| Sr. Observer | Degree in Sc/Eng | Minimum 7 years experience in land seismic data acquisition | , , | | | | |
| Sr, Navigator | Degree in Sc/Eng | Minimum 7 years experience in land seismic data acquisition | | | | | |
| Sr. QC | Degree in Sc/Eng | Minimum 7 years experience in land seismic data acquisition | | | | | |
| Sr. HSE Personnel | Degree in Sc/Eng | Minimum 7 years experience in oil & gas industry | | | | | |

Geological & Geophysical (G&G) Seismic Services Marine Seismic Data Acquisition - 2D/3D/4D Work Category

17201300S

The provision of personnel, equipments & services for 2D/3D/4D marine seismic data acquisition Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--|-------------------------------|--|-------------------------|----------------------|---|---|-------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai Totalidara | | | | | | |
| AGENT Business Development Manager | , , | Minimum 3 years experience in oil & gas exploration & production | | | Minimum 3 years experience or at least 3 projects successfully completed in marine | PRINCIPAL Certificate of seismic vessel International Association of Geophysical Contractors (IAGC) | | | | | | | |

Geological & Geophysical (G&G) Seismic Services Marine Seismic Data Acquisition - 2D/3D/4D Work Category

17201300S

The provision of personnel, equipments & services for 2D/3D/4D marine seismic data acquisition Work Category's Description

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|---------------|------------------|---|-----------------------------------|------------------------------------|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | | | E.g. CIDB, DOSH | |
| Party Chief | Degree in Sc/Eng | Minimum 7 years experience in marine seismic data acquisition | Manned office setup Warehouse | List of seismic vessel & equipment | | Certificate of seismic vessel | |
| Sr. Observer | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | (owned/lease) | | | International Association of Geophysical Contractors (IAGC) | |
| Sr. Navigator | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | |
| Sr. Engineer | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | |
| Sr. QC | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | |

Geological & Geophysical (G&G) Seismic Services Multicomponent Seismic Acquisition Work Category

17201400S

Provision of personnel, equipment & services for multi-component seismic data acquisition (i.e. OBC,OBN & OBS) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|-------------------------------|--|---|-------------------------|---|--|-----------------------------------|--|--|--|--|--|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| AGENT Business Development Manager | | | Manned office setup | | Minimum 3 years experience or at least 3 | PRINCIPAL International Association of Geophysical Contractors (IAGC) | | | | | | |

Geological & Geophysical (G&G) Seismic Services Multicomponent Seismic Acquisition Work Category

17201400S

Provision of personnel, equipment & services for multi-component seismic data acquisition (i.e. OBC,OBN & OBS) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|---|-----------------------------------|-----------------------------------|----------------------|--|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | | | |
| Party Chief | Degree in Sc/Eng | Minimum 7 years experience in marine seismic data acquisition | Manned office setup Warehouse | List of multi-component equipment | | International Associationof Geophysical Contractors (IAGC) | | | | | | |
| Sr. Observer | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | (owned/lease) | | | | | | | | | |
| Sr, Navigator | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | | | | | | |
| Sr. Engineer | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | | | | | | |
| Sr. QC | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | | | | | | |

Geological & Geophysical (G&G) Seismic Services Seismic Data Processing/Reprocessing Work Category

17201500S

Work Category's Description The provision of personnel, equipment & services for seismic data processing/reprocessing

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|---|-------------------------|----------------------|--|--|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | | | E.g. CIDB, DOSH | | | | | | |
| AGENT Business Development Manager | , , | experience in oil & gas exploration & production | | | Minimum 5 years experience or at least 5 | PRINCIPAL International Association of Geophysical Contractors (IAGC) | | | | | | |

Geological & Geophysical (G&G) Seismic Services Seismic Data Processing/Reprocessing Work Category

17201500S

Work Category's Description The provision of personnel, equipment & services for seismic data processing/reprocessing

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-----------------------|-------------------------------|--|-------------------------|---|--|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, Ari Standard | | | | |
| Center Manager | Degree in Sc/Eng | Minimum 10 years experience in seismic data processing | | List of processing software and hardware | | International Association of Geophysical Contractors (IAGC) | | | | | |
| Processing supervisor | Degree in Sc/Eng | Minimum 7 years experience in seismic data processing | | | | | | | | | |
| Group leader | Degree in Sc/Eng | Minimum 5 years experience in seismic data processing | | | | | | | | | |

Geological & Geophysical (G&G) Seismic Services Seismic Modelling Services Work Category

17201600S

The provision of personnel, equipment & services for seismic modelling services such as but not limited to seismic inversion, AVO and rock property inversion Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|-------------------------------|--|------------------------------|--|--|-----------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | | | |
| AGENT Business Development Manager | , , | Minimum 3 years experience in oil & gas exploration & production | AGENT Manned office setup | | | | | | | | | |
| PRINCIPAL Senior Quantitative Interpreter | Geophysics / Physics or | Minimum 10 years experience in Quantitative Interpretation | | Quantitative Interpretation software and hardware | PRINCIPAL Minimum 5 years experience or at least 5 projects successfully completed in Quantitative Interpretation Services | | | | | | | |

Geological & Geophysical (G&G) Seismic Services Seismic Modelling Services Seismic Modelling System Work Category

17201600S SG2020602

The provision of personnel, equipment & services for seismic modelling services (e.g. seismic inversion, AVO, rock property inversion) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------------------|-------------------------------|--|----------------------|---|-----------------------------------|-----------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | Lig. 100, Ai Totalidard | | | | |
| Senior Quantitative Interpreter | | Minimum 10 years experience in Quantitative Interpretation | | Quantitative Interpretation software and hardware | | | | | | | |

Geological & Geophysical (G&G) Seismic Services Transition Zone Seismic Data Acquisition Work Category

17201700S

Work Category's Description $Provision \ of \ personnel, \ equipment \ \& \ services \ for \ transition \ zone \ (near \ shore \ <20m \ water \ depth) \ seismic \ data \ acquisition$

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---|-------------------------------|--|---|---|---|--|-----------------------------------|--|--|--|--|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| | | | • | DDINOIDAL | DDINOIDAL | | | | | | |
| AGENT Business Development Manager | | Minimum 3 years experience in oil & gas exploration & production | | PRINCIPAL List of transition zone seismic acquisition equipment | Minimum 5 years experience or at least 5 | PRINCIPAL International Association of Geophysical Contractors (IAGC) | | | | | |

Geological & Geophysical (G&G) Seismic Services Transition Zone Seismic Data Acquisition Work Category

17201700S

Work Category's Description $Provision \ of personnel, equipment \& \ services \ for \ transition \ zone \ (near \ shore \ <20m \ water \ depth) \ seismic \ data \ acquisition$

| | | | MINIMUM TECHNI | CAL REQUIREMENT | | | |
|---------------|------------------|---|-----------------------------------|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Party Chief | Degree in Sc/Eng | Minimum 7 years experience in marine seismic data acquisition | Manned office setup Warehouse | List of transition zone seismic acquisition equipment | | International Association of Geophysical Contractors (IAGC) | |
| Sr. Observer | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | (owned/lease) | | | | |
| Sr, Navigator | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | |
| Sr. Engineer | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | |
| Sr. QC | Degree in Sc/Eng | Minimum 5 years experience in marine seismic data acquisition | | | | | |

Geological & Geophysical (G&G) Site Investigation Site Investigation - Offshore Work Category 17211100S

Provision of personnel, equipment & services for analogue (e.g. bathymetry, side scan sonar, sub-bottom profiler (including AUV for deepwater)), digital survey & drop core for well, platform & pipeline (offshore) site investigation Work Category's Description

Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------|--|---|--|---|----------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment / Machineries E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 150, API Standard |
| Party Chief | Degree in Geosciences /Sc. | Minimum 8 years in oil & gas exploration & production geophysical survey | Manned office setup Warehouse / Workshop | 1.Survey Vessel (Owned/Long Term Leased) 2.Surveying & positioning | | | |
| Sr. Surveyor | Diploma in Geomatics or equivalents | Minimum 5 years in oil & gas exploration & production geophysical survey | | equipment 3.Data recording & processing equipment 4.Geophysical equipment | | | |
| Sr. Geophysicist | Degree in Geosciences /Sc. | Minimum 8 years in oil & gas exploration & production geophysical survey | | | | | |

| Work Category | : | | Geological & Geophysical (G&G) |
|---------------|---|-----------|--------------------------------|
| | | | Site Investigation |
| | | 17211200S | Site Investigation - Onshore |
| | | | |

Work Category's Description : Provision of personnel, equipment & services for topographical data for Well, Platform & Pipeline onshore geohazard investigation, Underground Utilities Detection

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------|---------------|--|--|---|-----------------------------------|-----------------|--------------------------|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | 2.g. 100, 74 . Otanua. u |
| Party Chief | /Sc. | Minimum 8 years in oil & gas exploration & production geophysical survey | Manned office setup Warehouse / Workshop | 1.Surveying & positioning equipment 2.Data recording & processing equipment 3.Geophysical equipment | | | |
| Sr. Surveyor | equivalents | Minimum 5 years in oil & gas exploration & production geophysical survey | | | | | |
| Sr. Geophysicist | /Sc. | Minimum 8 years in oil & gas exploration & production geophysical survey | | | | | |

Work Category : Health, Safety, Security, & Environment
Environmental Sustainability

18101000S Climate Change Services

Work Category's Description : The provision of climate change services such as but not limited to greenhouse gas emissions, reduction, validation and verification as well as climate change adaptation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------------------------------|--|---|--|-------------------------|---|----------------------------|---|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | • | | E.g. CIDB, DOSH | • |
| | Bachelor's Degree in Science or Engineering | Minimum 8 years experience related to Climate Change services in Oil & Gas/Energy Industry | | | Minimum 5 years experience related to Climate Change services in Oil & Gas/Energy Industry | | |
| Team Leader / Project Manager | Bachelor's Degree in Science or Engineering | Minimum 5 years experience related to Climate Change services in Oil & Gas/Energy Industry | | | | | |
| Project Team Member / Consultant | Bachelor's Degree in Science or Engineering | Minimum 3 years experience related to Climate Change services in Oil & Gas/Energy Industry | | | | | |

Health, Safety, Security, & Environment HSE Consultancy Services Industrial Hygiene Survey & Services Work Category : 18111100S

The provision of Industrial Hygiene Survey and Consultancy services such as but not limited to Health Risk Assessment, Chemical Health Risk Assessment, Indoor Air Quality, Noise Monitoring Services and Dust Monitoring Services Work Category's Description

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------------|-------------------------------|---|--------------------------|----------------------|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 130, AFT Standard | | | | |
| Project Manager /Engineer | Science/Occupational | Minimum 3 years experience in managing Industrial Hygiene contracts/projects | | | | | | | | | |

Work Category : Health, Safety, Security, & Environment

Environmental Sustainability

18101100S Sustainability Services

Work Category's Description : The provision of services related to sustainability report writing in accordance with international standards and other regulatory requirements (Note: Familiar with Global

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|---|--|-------------------------|---|-------------------------------|---|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | .g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | Bachelor's Degree in | Minimum 6 years experience in Sustainability Reporting Services | | | Minimum 1 Sustainability Report for Oil & Gas industry; and Minimum 4 Sustainability Report for other industry | | Comply to stipulated standards and guidelines i.e. IPIECA, GRI and etc. | | | | |

Health, Safety, Security, & Environment HSE Consultancy Services Social Assessment Consultancy Work Category 18111600S

Work Category's Description

The provision of Social Performance Consultancy services such as but not limited to Social Impact Assessment, Social Risk Assessment, Human Rights Due Diligence, Social Baseline Survey and social audit and assurance, and any social performance related services

Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|----------------------------------|--|---|-----------------|-------------------------|--------------------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| | Sociology/Anthropology of equivalent in any discipline. | Minimum of ten (10) years' experience in conducting Social Impact Assessment/Social Risk Assessment/Human Rights Due Dilligence | | | Minimum 3 approved SIA reports | | |
| | Sociology/Anthropology/La w of equivalent in any discipline. | Minimum of five (5) years' experience in conducting Social Impact Assessment/Social Risk Assessment/Human Rights Due Diligence | | | | | |
| Social Performance Consultant | Sociology/Anthropology/La w of equivalent in any | Minimum of five (5) years experience in Social Performance consultancy and assessment | | | | | |

Work Category : Health, Safety, Security, & Environment

Monitoring & Detection Systems and Maintenance

18141000P Continuous Emission Monitoring System

Work Category's Description : To design, supply, deliver, install, calibrate and commission continuous emission monitoring system (i.e. DOE Continuous Emission Monitoring System)

Mode of Operation : Dealer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|---|--|-----------------------------------|----------------------|--|-----------------------------------|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Project Manager | Degree in Engineering | Minimum 5 years | Manned and permanent office setup | Calibration kit | | E.g. 0101, 500.1 | |
| Design Engineer | Degree in Environmental / Chemical Engineering or Degree in Environmental Science | Minimum 3 years experience in designing CEMS systems | | | | | |

Work Category Health, Safety, Security, & Environment Monitoring & Detection Systems and Maintenance Radiation Survey, Monitoring & Services : 18141500S

The provision of Radiation Survey, Monitoring & Services such as but not limited to radioactive material and TENORM including but not limited to monitoring, analysis, mapping, decontamination and waste handling Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------------------|--|--|--------------------------|----------------------|-------------------------------|---|-------------------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | L.g. 100, Ai i otalidald | | | | |
| Radiation Protection Officer (RPO) | Possess valid competency certification from AELB | | | | | Approved/valid license (Class A and H) from AELB for Technically Enhanced Naturally Occurring Radioactive Materials (TENORM) | Atomic Energy Licensing Act 1984 | | | | |

Health, Safety, Security, & Environment Safety/Firefighting Equipment Fire and Gas System Work Category :

18191000P

To design, engineer, assemble, supply, deliver, install, hook up, test, commission and training of Fire and Gas System for process area inclusive of beacons, sounder, fire alarm panel Work Category's Description

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------------------|---------------|------------|--------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Fire and Gas System related works | | | | | | |

Health, Safety, Security, & Environment Safety/Firefighting Equipment Fire Engines/Tenders Work Category :

18191100P

Work Category's Description To design, assemble, install, test, supply, deliver, commission fire engines/tenders and conduct training on operation

Mode of Operation Assembler

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------------------|---------------|------------|--|-------------------------|--|---------------------------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | | | | External Body | | | | | |
| Designation | Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Fire/Heat Detector related works | | | | | | |

Work Category : Health, Safety, Security, & Environment
Safety/Firefighting Equipment
18191200P Fire Protection System for Building

Work Category's Description : To design, engineer, assemble, supply, deliver, install, hook up, test, commission and training of Fire Protection System for Building

Mode of Operation : System Integrator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|--|---|---|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | E.g. Tools | | E.g. CIDB, DOSH | |
| Technical Manager | Degree in any Engineering field | Minimum 5 years experience in Fire and Gas System | Office setup Assembling facility Testing facility Astaging Area | Lifting equipment Computer Aided Design (CAD) software SEmulator/ Simulator for | | Business License from Local Authority Fire Protection System for Building shall be SIL2 | |
| Project /Field Service Engineer | Degree in any Engineering field and trained & certified from Principal | Minimum 3 years experience in Fire and Gas System & Sub System Integration, configuration and troubleshooting | 5.Training Facility | logic testing & configuration 4.Multi Meter 5.Hand tools 6.Calibrators (owned or rent) | | (Safety Integrity Level) certified | |
| System Engineer | Degree in any Engineeringand trained & certified from Principal | Minimum 5 years experience in Fire and Gas System design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Work Category : Health, Safety, Security, & Environment
Safety/Firefighting Equipment
18191300P HAZMAT Equipment & Vehicles

Work Category's Description : To design, assemble, install, test, supply, deliver, commission and conduct training on operation for Hazardous Material (HAZMAT) Equipment & Vehicles

Mode of Operation : Assembler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|-------------------------|----------------------|---|-----------------------------------|-----|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | 3 | _ | | E.g. CIDB, DOSH | g , | | | | |
| | | | | | Principal to have minimum 10 years experience in Fire/Heat Detector related works in oil and gas industry | | | | | | |

Health, Safety, Security, & Environment Security Management Security Equipment & Surveillance System Work Category : 18201100P

To design, engineer, assemble, supply, deliver, install, hook up, test, commission and training of Security Equipment and Surveillance System such as but not limited to CCTV, motion detection and perimeter intrusion detection Work Category's Description

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Security Equipment and Surveillance System | | | | | | |

| Work Category | : | | Health, Safety, Security, & Environment |
|-----------------------------|---|-----------|--|
| | | | Security Management |
| | | 18201200S | Security Equipment & Surveillance System Maintenance |
| Work Category's DeSIription | : | | materials, consumables, equipment and facilities necessary for design, repair, upgrading, change out/replacement, modification, maintenance, |

Mode of Operation : Agent

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|---------------|---|--------------------------|---|---|-------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | 0 | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | | Minimum 3 years experience in Security Equipment and Surveillance System configuration and troubleshooting, trained and certified from Principal | 2.Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | Principal to have minimum 10 years experience in Security Equipment and Surveillance System Maintenance | | |
| Technician | Principal | Minimum 5 years experience in Security Equipment and Surveillance System servicing | | | | | |

Health, Safety, Security, & Environment Security Management Security Equipment & Surveillance System Maintenance Work Category 18201200S

The provision of labour, materials, consumables, equipment and facilities necessary for design, repair, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Security Equipment and Surveillance System Maintenance (e.g. Access control, CCTV, PAGA, etc) Work Category's DeSIription

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---------------------------------|--|--------------------------|---|----------------------|-------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Expendice | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in any Engineering field | Minimum 3 years experience in Security Equipment and Surveillance System configuration and troubleshooting | 2.Workshop | Hand tools Calibrators Test Equipment Software / Tools for diagnostic | | | |
| Technician | | Minimum 5 years experience in Security Equipment and Surveillance System servicing | | | | | |

Health, Safety, Security, & Environment Survival Equipment Services Free Fall Work Category :

18221000S

Work Category's Description : The provision of servicing free fall survival craft

Self-Operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|-------------------------------|---|--------------------------|---|--|-----------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Mechanical Engineer | | 3 yrs exp in marine activities and related field | Test pond | Lifting equipment, hydro test machine, Nitrogen recharging machine, 6 ft cylinder rack (fit for offshore use), winch test bench | yr exp in marine activities and related field | | | | | | |
| Supervisor/ Technician | | 5 yrs exp in marine activities and related field | | | | | | | | | |

Health, Safety, Security, & Environment Survival Equipment Services Single Fall Work Category :

18221400S

Work Category's Description The provision of servicing single fall survival craft

Self-Operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------|------------------------------------|---|--------------------------|---|--|-----------------|------------------------|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Mechanical Engineer | Degree in Automotive/Marine Eng | 3 yrs exp in marine activities and related field | Test pond | Lifting equipment, hydro test machine, Nitrogen recharging machine, 6 ft cylinder rack (fit for offshore use), winch test bench | 1 yr exp in marine activities and related field | | |
| Supervisor/ Technician | Certificate in related field | 5 yrs exp in marine activities and related field | | | | | |

Health, Safety, Security, & Environment Survival Equipment Services Twin fall Work Category :

18221500S

Work Category's Description : The provision of servicing twin fall survival craft

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------|------------------------------------|---|--------------------------|---|--|-------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Mechanical Engineer | Degree in Automotive/Marine Eng | 3 yrs exp in marine activities and related field | | Lifting equipment, hydro test machine, Nitrogen recharging machine, 6 ft cylinder rack (fit for offshore use), winch test bench | 1 yr exp in marine activities and related field | | |
| Supervisor/ Technician | | 5 yrs exp in marine activities and related field | | | | | |

Work Category : Health, Safety, Security, & Environment
Waste management
Decontamination Services

Work Category's Description : The provision of manpower, materials, consumables and equipment for decontamination services such as but not limited to biological, chemical and radioactive contamination

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-----------------------|-------------------------------|---|--------------------------|---|----------------------|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Subject Matter Expert | | Minimum 5 years experiences in decontamination services | 2.Warehouse | Relevant decontamination tools and equipment Spraying Equipment | | | | | | | |
| Technician | | Minimum 3 years experiences in decontamination services | | Hydrojet Receptacle (Storage Tank) | | | | | | | |

Health, Safety, Security, & Environment Waste management Mercury Integrated Services Work Category 18231200S

Work Category's Description

The provision of manpower, material, equipment, consumables and disposal for mercury integrated services inclusive of comprehensive HAZMAT (mercury) training, mercury mapping/survey, offline mercury decontamination, mercury waste handling, mercury HAZMAT supervision (monitoring), non-biological mercury analysis and Mercury Removal Unit (MRU) monitoring

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------|---|--|---|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| • | | P | | | | • | |
| Project Manager | Degree in Engineering / Sciences | Minimum 7 years working experience with minimum 3 years experience in mercury monitoring, mercury mapping and assessment study, MRU profiling study and mercury clean-up and decontamination activities | Analytical laboratory for analysis of organic & inorganic samples (from water, solids, gas and hydrocarbon), industrial hygiene and biological samples. | Laboratory equipment for sample analysis i.e. ICP- MS, Cold Vapor Atomic Fluorescence, Coupled Plasma-Mass Spectrometry, Atomic Absorption Spectrophotometry, Atomic Fluorescence Spectroscopy 2. Direct reading equipment i.e. mercury vapor analyzer 3. Colorimetric detector | | Laboratory Accreditation Scheme of Malaysia (SAMM) to ISO/IEC 17025 | |
| Chemist | Degree in Chemistry / Chemical Engineering / Industrial Chemistry Associate Member with Institut Kimia Malaysia | Minimum 5 years experience working as a chemist | | tubes 4. Self contained breathing apparatus and chemical suits 5. Portable decontamination equipment and station i.e. shower, boot wash bath, portable hand sprayer/backpack sprayer 6. Mercury vacuum cleaners 7. Decontamination equipment and station i.e. shower, boot wash bath, shower, boot wash bath, | | | |
| Field Technician | Diploma in Englineering/ Science | Minimum 3 years experience in mercury management services | | portable hand sprayer/ backpack sprayer | | | |

Health, Safety, Security, & Environment Medical Services Work Category 18130000S

The provision of manpower, material, consumables, facility and equipment for management and operation of Medical Services (e.g. blood test, urine test, management & operation of medical clinics, etc.) and Medical Specialized Services (e.g. providing medical advice, treatment and medical assistance at facilities, include medevac for injured person to the hospital, etc.) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warenouse, Dockyaru | L.g. 10015 | | E.g. CIDB, DOSH | E.g. 130, AFT Standard | | | | |
| | | | | | | Registration with Ministry of Health (MoH) and Malaysia Medical Council (MMC) | | | | | |

Health, Safety, Security, & Environment Protection Equipment Fire Resistant Doors Work Category :

18151200P

Work Category's Description To design, supply, deliver and install Fire Resistant Doors

Mode of Operation Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------------|--------------------------|----------------------|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. warenouse, bockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | |
| | | | | | | Manufacturing License | | | | | |

Health, Safety, Security, & Environment Safety & Firefighting Services Fixed Fire Protection Systems Work Category :

18181000S

Work Category's Description The provision of manpower, materials, consumables, equipment and facilities for maintenance and testing of fixed fire protection systems

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | E.g. 10015 | | E.g. CIDB, DOSH | L.g. 100, Ari Standard | | | | |
| | | | | | | CIDB - M | | | | | |

Health, Safety, Security, & Environment Safety & Firefighting Services Mobile Fire Fighting Appliances Servicing Work Category :

18181100S

Work Category's Description The provision of Mobile Fire Fighting Appliances Servicing such as but not limited to fire trucks, fire extinguisher, fire hose/fire nozzle and foam branch

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|--|------------------------|--|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | | |
| | | | | | | CIDB - M Sijii LULUS Kursus Keselamatan & Pencegahan Kebakaran' from Jabatan Bomba | | | | | | |

Health, Safety, Security, & Environment Survival Equipment Services Liferaft Work Category :

18221100S

Work Category's Description The provision of life raft services and maintenance

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|---|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otandard | | | | | |
| | | | | | | SOLAS(Safety of life at sea) IMO(International Maritime Organization) | | | | | | |

Health, Safety, Security, & Environment Waste Management Biological/Clinical Waste Disposal Work Category :

18231000S

Work Category's Description The provision of manpower, equipment, transportation and facilities for biological/clinical waste disposal but not limited to microwave treatment

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|-------------------------------|---|--------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|--|--|
| | Key Personnel | • | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 otalidard | | | | | |
| | | | | | | DOE – "Lesen Rawatan | | | | | | |
| | | | | | | Buangan Menggunakan | | | | | | |
| | | | | | | Gelombang Mikro" | | | | | | |

Health, Safety, Security, & Environment Waste Management Off-Site Scheduled Waste Storage Services Work Category :

Self Operated

Mode of Operation

18231300S

Work Category's Description The provision of manpower, equipment and facilities for off-site scheduled waste storage services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|----------------------|---------------------------------------|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | | |
| | | | | | | DOE – "Lesen Penstoran Luar Tapak" | | | | | | |

Health, Safety, Security, & Environment
Waste Management
Off-Site Scheduled Waste Treatment, Recycle & Recovery Work Category

18231400S

Work Category's Description The provision of manpower, materials, consumables, equipment and facilities necessary for Off-Site Scheduled Waste Treatment, Recycle & Recovery

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------------------|--------------------------|-------------------------------|-----------------------------------|---|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment C | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Standard | | | | | |
| | | | | | | DOE – "Lesen Pemerolehan Kembali Luar Tapak" | | | | | | |

Health, Safety, Security, & Environment Waste Management Radioactive Waste Disposal Work Category

18231600S

Work Category's Description The provision of manpower, equipment, transportation and facilities for disposal of radioactive waste

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|------------------------|--------------------------|----------------------|-------------------------------|--|--------------------------|
| Key Personnel | | Facilities Equipment C | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 10018 | | E.g. CIDB, DOSH | L.g. 100, Ai i otalidald |
| | | | | | | Approved/valid license (Class A and H) from AELB specifically for Technically Enhanced Naturally Occurring Radioactive Materials (TENORM) | |

Work Category : Health, Safety, Security, & Environment
Waste Management
18231700S Scheduled Waste Disposal

Work Category's Description : The provision of manpower, equipment, transportation and facilities for scheduled waste disposal but not limited to physical chemical treatment (PCT), Solidification, landfill or incineration

Mode of Operation : Self Operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|-------------------------------|------------|-------------------------------------|-------------------------|----------------------|---|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | 2.g. 100.0 | | E.g. CIDB, DOSH | | | | | | |
| | | | | | | DOE – "Lesen Perlupusan Buangan Terjadual" | | | | | | |

Health, Safety, Security, & Environment Waste Management Scheduled Waste Transportation Work Category :

18231800S

Work Category's Description The provision of manpower, equipment and transportation for scheduled waste transportation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|--|--------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Lig. Warehouse, Bookyara | g. 70010 | | E.g. CIDB, DOSH | Ligi 100, 7ti 7 Otanuaru | | | | | |
| | | | | | | DOE – "Lesen Pengangkutan Buangan Terjadual" | | | | | | |

Health, Safety, Security, & Environment Security Management Security Services Work Category :

18201000S

Work Category's Description The provision of security services not limited to site installation, cash in transit, and surveillance system inspection & maintenance

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|---|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyaru | 2.9. 10010 | | E.g. CIDB, DOSH | | | | | | |
| | | | | | | Kementerian Dalam Negeri (KDN) - Private Agency License | | | | | | |

Work Category : Instrumentation & Control Equipment and Services
Certification & Consultancy Services
20101100S Measurement/Metering of Hydrocarbon Consultancy

Work Category's Description : The provision of Measurement/Metering Consultancy work such as development of Measurement Concept, Metering Project execution consultancy, study related to metering matters and hydrocarbon allocation. Audit and assessment on Metering System and Hydrocarbon Allocation System

... 3

Mode of Operation : Agent

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---------------|--|-----------------------------------|------------------------|--|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company C Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | Minimum 5 years experience in Custody Metering | Manned and permanent office setup | Configuration software | Principal to have minimum 10 years experience in O&G Measurement/Metering of Hydrocarbon Consultancy | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|-----------------------------|---|-----------|---|
| | | | Certification & Consultancy Services |
| | | 20101100S | Measurement/Metering of Hydrocarbon Consultancy |
| Work Category's Description | : | | surement/Metering Consultancy work such as development of Measurement Concept, Metering Project execution consultancy, study related to |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|---|-----------------------------------|---|----------------------|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | Minimum 10 years experience in Custody Metering | Manned and permanent office setup | Engineering & Configuration software | | | | | | | |

Instrumentation & Control Equipment and Services Control Panels Annunciator/Master Shutdown Panel Work Category

20111000P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Annunciator/Master Shutdown Panel Work Category's Description

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company C Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Annunciator/ Master Shutdown Panel related works | | | | | | |

Instrumentation & Control Equipment and Services Control Panels Annunciator/Master Shutdown Panel Work Category

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Annunciator/Master Shutdown Panel Work Category's Description

Mode of Operation System Integrator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|--|---|---|--|---|--|------------------------|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | . , , , , , , , , , , , , , , , , , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager | Degree in any Engineering field | | 3.Testing facility 4.Staging Area 5.Training Facility | 1.Lifting equipment 2.Computer Aided Design (CAD) software 3.Pneumatic Simulator for logic testing & configuration 4.Multi Meter 5.Hand tools 6.Callibrators | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | |
| Project /Field Service Engineer | Degree in any Engineering field and trained & certified from Principal | | | | | | |
| System Engineer | Degree in any Engineering and trained & certified from Principal and trained & certified from Principal | experience in | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Instrumentation & Control Equipment and Services Control Panels Annunciator/Master Shutdown Panel Work Category :

20111000P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Annunciator/Master Shutdown Panel Work Category's Description

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | |
|------------------------------------|---|--|--|--|--|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | , and the second | E.g. CIDB, DOSH | L.g. 100, Al 1 otalidard |
| Production Manager | Degree in any Engineering fieldDegree in any Engineering field and trained & certified from Principal | Minimum 5 years experience in Annunciator/ Master Shutdown Panel productionMinimum 3 years experience in Annunciator/ Master Shutdown Panel selection and servicing , trained and certified from Principal | 1.Office setup 2.Manufacturing facility 3.Testing facility 4.Training Facility | 1.Heavy lifting equipment 2.Computerized Numerical Control Machineries 3.Milling Machines 4.Test Equipment 5.Programmable Logic & Hydraulic Test Equipments 6.Computer Aided Design (CAD) software | Business License from Local Authority COON - "Surat Kebenaran Operasi" | |
| Project /Field Service Engineer | Degree in any Engineering field and trained & certified from Principal | | | | | |
| Design Engineer | Degree in any Engineering and trained & certified from Principal | Minimum 5 years experience in Annunciator/ Master Shutdown Panel design | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | |
| R& D Engineer | Degree in any Engineering and trained & certified from Principal | Minimum 5 years experience in Annunciator/ Master Shutdown Panel design | | | | |

Instrumentation & Control Equipment and Services Control Panels Instrument Control Panel Work Category :

20111100P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Instrument Control Panel Work Category's Description

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Instrument Control Panel related works | | | | | | |

Instrumentation & Control Equipment and Services Control Panels Instrument Control Panel Work Category :

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Instrument Control Panel Work Category's Description

Mode of Operation System Integrator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|--|---|---------------------------------------|---|----------------------|---|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager | Degree in any Engineering field | Minimum 5 years experience in Instrument Control Panel production | 3.Testing facility | Lifting equipment Computer Aided Design (CAD) software SEmulator/ Simulator for | | 1.Business License from Local Authority 2.DOSH – "Surat | |
| Project /Field Service Engineer | Degree in any Engineering field and trained & certified from Principal | | 4.Staging Area 5.Training Facility | 3.Emulator for logic testing & configuration 4.Multi Meter 5.Hand tools | | Kebenaran Operasi* | |
| System Engineer | Degree in any Engineering and trained & certified from Principal | Minimum 5 years experience in Instrument Control Panel design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Instrumentation & Control Equipment and Services Control Panels Instrument Control Panel Work Category :

20111100P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Instrument Control Panel Work Category's Description

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|--|---|--|---|-------------------------------|---|------------------------|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, E.g. Tools Dockyard | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | E.g. 100IS | | E.g. CIDB, DOSH | E.g. 150, API Standard |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in Instrument Control Panel production | Office setup 2.Manufacturing facility 3.Testing facility 4.Training Facility | 1.Heavy lifting equipment 2.Computerized Numerical Control Machineries 3.Milling Machines 4.Test Equipment 5.Programmable Logic & Hydraulic Test Equipments 6.Computer Aided Design | | 1.Business License from Local Authority 2.DOSH — "Surat Kebenaran Operasi" | |
| Project /Field Service Engineer | Degree in any Engineering field and trained & certified from Principal | | | (CAD) software | | | |
| Design Engineer | Degree in any Engineering and trained & certified from Principal | Minimum 5 years experience in Instrument Control Panel design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R& D Engineer | Degree in any Engineering and trained & certified from Principal | Minimum 5 years experience in Instrument Control Panel design | | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|---------------|---|-----------|--|
| | | | Controllers |
| | | 20121000P | Electronic Type |
| | | | |

Work Category's Description

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and provide training of Electronic Type controllers such as but not limited to Single Loop Controller, Anti Surge Controller, Governor Controller and Turbine Controller

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|-----------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company C Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Instrumentation & Control related works | | | | | | |

Instrumentation & Control Equipment and Services Controllers Pneumatic Type Controllers Work Category :

20121100P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and provide training of Pneumatic Controllers Work Category's Description

Mode of Operation

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|------------|-------------------------------|------------|---|-------------------------------|------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Pneumatic Controllers related works | | | | | |

Instrumentation & Control Equipment and Services Controllers Programmable Controllers Work Category :

20121200P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of General PLC (non safety type) Work Category's Description

Mode of Operation Agent

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|------------|-----------------------------|------------|--|-------------------------------|------------------------|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 10 years experience in O&G PLC related works | | | | | |

Work Category : Instrumentation & Control Equipment and Services
Custody Metering
20141000P Gas Metering - Custody Transfer/Fiscal Allocation System

Work Category's Description : To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Gas Metering - Custody Transfer/Fiscal Allocation System

Mode of Operation : Agent

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------------------------|---------------|------------|-------------------------------|------------|---|-------------------------------|------------------------|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | |
| | | | | | Principal to have minimum 10 years experience in 0&G Gas Metering - Custody Transfer/ Fiscal Allocation System related works | | | |

Instrumentation & Control Equipment and Services Custody Metering Tank Gauge Work Category :

20141300P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Tank Gauge Work Category's Description

Mode of Operation Agent

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------------------------|---------------|------------|-------------------------------|------------|--|-------------------------------|------------------------|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | |
| | | | | | Principal to have minimum 10 years experience in O&G Tank Gauge related works | | | |

Instrumentation & Control Equipment and Services Custody Metering Test & Calibration - Custody Metering Work Category

Work Category's Description The provision of custody metering test & calibration related works

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------------------------|---|---|-------------------------------|------------|----------------------|---|------------------------|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | |
| Engineer | Degree in relevant Engineering discipline/field | Minimum 5 years of experience in O&G custody metering test & calibration related works | | | experience in O&G | SIRIM - Calibration & Registration Endorsement System | | |
| | Diploma or certificates in instrument / electronics / mechatronics / automation | Minimum 5 years of experience in O&G custody metering test & calibration related works | | | | | | |

Instrumentation & Control Equipment and Services Custody Metering Weighing Machine Equipment Work Category

20141500P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Weighing Machine Equipment Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|-----------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in industrial Weighing Machine Equipment related works | | | | | | |

Work Category : Instrumentation & Control Equipment and Services

Custody Metering

20141600P Wet Gas Metering

Work Category's Description : To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Wet Gas Metering

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---|-----------------------|--|-----------------|--|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Engineer | Degree in relevant Engineering discipline/field | | Principal Fabrication and testing facilities Agent After sale service and staging facility setup in | | Principal to have minimum of 10 years experience in O&G Wet Gas Metering related works and engineering capabilities for wet gas metering design. | | |
| | Diploma or certificates in instrument / electronics / mechatronics / automation | experience in O&G Wet | Malaysia | | Ü | | |

Work Category : Instrumentation & Control Equipment and Services

Custody Metering

20141600P Wet Gas Metering

Work Category's Description : To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Wet Gas Metering

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---|--|---|---|---|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in relevant Engineering discipline/field | Minimum 5 years of experience in O&G Wet Gas Metering related works | Fabrication and testing facilities After sale service and staging facility setup in Malaysia | required to perform assembling, testing, | Minimum 5 years experience in O&G Wet Gas Metering related works and engineering capabilities for wet gas metering design. | | |
| | Diploma or certificates in instrument / electronics / mechatronics / automation | Minimum 5 years of experience in O&G Wet Gas Metering related works | | | | | |

Instrumentation & Control Equipment and Services Emergency Shutdown (ESD) System Work Category

To design, engineer, assemble, supply, deliver, install, hook up, test, commission and training of Emergency Shutdown System (ESD) such as but not limited to Safety Programmable Logic Controller (TUV Rhineland certified and tested to IEC 61508), Electro Mechanical Relay Shutdown System, Pneumatic Shutdown System and Solid State Shutdown System Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---------------|-------------------------------|-----------------|----------------------|---|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | Principal to have minimum 10 years experience in Emergency Shutdown System (ESD) related works in oil and gas industry (e.g. Safety PLC, Electro Mechanical Relay, Pneumatic, Solid State). | | |

Work Category

Instrumentation & Control Equipment and Services
Field Instrumentation Maintenance
Analyser/QMI Process Instruments
Continuous Emission Monitoring System (CEMS) & Sampling System 20161011S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of Continuous Emission Monitoring System (CEMS) and sampling system Work Category's DeSIription

Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|---------------------------------------|---|----------------------------|---|---|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | Degree in any Engineering field | experience in Continuous | office setup 2.Workshop | Hand tools Calibrators Test Equipment Software / Tools for diagnostic | Principal to have minimum 10 years experience in O&G for Continuous Emission Monitoring System (CEMS) and sampling system related works | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Continuous Emission Monit Oring System (CEMS) and sampling system servicing | | | | | |

Instrumentation & Control Equipment and Services
Field Instrumentation Maintenance
Analyser/OMI Process Instruments
Continuous Emission Monitoring System (CEMS) & Sampling System Work Category

20161011S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of Continuous Emission Monitoring System (CEMS) and sampling system Work Category's DeSIription

Mode of Operation Self-Operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|-------------------|---|--|---|----------------------|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | | Minimum 3 years experience in Continuous Emission Monit Oring System (CEMS) and sampling system configuration and troubleshooting | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| Technician | Engineering field | Minimum 5 years experience in Continuous Emission Monit Oring System (CEMS) and sampling system servicing | | | | | |

Instrumentation & Control Equipment and Services Field Instrumentation Maintenance Analyser/QMI Process Instruments and Sampling System Gas Chromatograph & Sampling System Work Category

20161012S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of Gas Chromatograph and Sampling System Work Category's DeSIription

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------------------|---------------------------------------|---|---|---|---|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project /Field Service Engineer | | experience in Gas | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | Principal to have minimum 10 years experience in O&G for Gas Chromatograph and Sampling System related works | | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Gas Chromatograph and Sampling System servicing | | | | | | | | | |

Instrumentation & Control Equipment and Services Field Instrumentation Maintenance Analyser/GMI Process Instruments and Sampling System Gas Chromatograph & Sampling System Work Category

20161012S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of Gas Chromatograph and Sampling System Work Category's DeSIription

Mode of Operation Self-Operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|-------------------|---|--|---|----------------------|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| | Engineering field | Minimum 5 years experience in Gas Chromatograph and Sampling System servicing | | | | | |

Instrumentation & Control Equipment and Services
Field Instrumentation Maintenance
Analyser/QMI Process Instruments and Sampling System
General Analyser/QMI Process Instruments, Analyzer House & Sampling System Work Category :

20161013S

Work Category's DeSIription :

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of General Analyser/QMI Process Instruments Including liquid & gas analyser application such as mercury, H2S, CO2, portable analyzer and Analyzer Shelter/House

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|---------------------------------------|--|--|---|---|-------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | Degree in any Engineering field | Minimum 3 years experience in Analyser/QMI Process Instruments, Analyzer House and Sampling System configuration and troubleshooting, trained and certified from Principal | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | Principal to have minimum 10 years experience in O&G for General Analyser/QMI Process Instruments, Analyzer House and Sampling System related works | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Analyser/QMI Process Instruments, Analyzer House and Sampling System servicing | | | | | |

Instrumentation & Control Equipment and Services
Field Instrumentation Maintenance
Analyser/QMI Process Instruments and Sampling System
General Analyser/QMI Process Instruments, Analyzer House & Sampling System Work Category

20161013S Work Category's DeSIription

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of General Analyser/QMI Process Instruments Including liquid & gas analyser application such as mercury, H2S, CO2, portable analyzer and Analyzer Shelter/House

Mode of Operation Self-Operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|--|---|--|---|-------------------------------|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in any Engineering field | Minimum 3 years experience in Analyser/QMI Process Instruments, Analyzer House and Sampling System configuration and troubleshooting | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| Technician | Certificate in relevant Engineering field | Minimum 5 years experience in Analyser/QMI Process Instruments, Analyzer House and Sampling System servicing | | | | | |

Instrumentation & Control Equipment and Services Field Instrumentation Maintenance Analyser/OMI Process Instruments and Sampling System Specialized Analyzer Work Category

20161014S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of Specialized Analyzer such as but not limited to Mass Spectrometer, Tunable Laser Diode (TLD) and Near Infrared (NIR) Work Category's DeSIription

Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|---------------------------------|---|-----------------|-----------------------------------|--|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company a Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | Degree in any Engineering field | Minimum 3 years experience in Specialized Analyzer configuration and troubleshooting, trained and certified from Principal | 2.Workshop | 2.Calibrators 3.Test Equipment | Principal to have minimum 10 years experience in O&G for Specialized Analyzer related works | | |
| Technician | | Minimum 5 years experience in Specialized Analyzer servicing | | | | | |

Instrumentation & Control Equipment and Services Field Instrumentation Maintenance Analyser/QMI Process Instruments and Sampling System Specialized Analyzer Work Category 20161014S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, upgrading, change out/replacement, troubleshooting, testing and commissioning of Specialized Analyzer e.g. Mass Spectrometer, Tunable Laser Diode (TLD), Near Infrared (NIR) and etc. Work Category's DeSIription

Mode of Operation Self-Operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|---------------|---|--|---|-------------------------------|-----------------|------------------------|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | | Minimum 3 years experience in Specialized Analyzer configuration and troubleshooting | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| Technician | | Minimum 5 years experience in Specialized Analyzer servicing | | | | | |

| Work Category | : | Instrumentation & Control Equipment and Services Field Instrumentation Maintenance 20161600S Radioactive Based Instrument Maintenance |
|-----------------------------|---|--|
| Work Category's DeSIription | : | The provision of labour, consumables, equipment and facilities necessary for testing, calibration, repair, replacement, transportation and removal of Radioactive Based Instrument |
| Mode of Operation | : | Agent |

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|-----------------------------|------------|----------------------|--|------------------------|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | | AELB Class D, E & F Or AELB Class A | | | |

| Work Category | : | Instrumentation & Control Equipment and Services Field Instrumentation Maintenance |
|-----------------------------|---|--|
| | | 20161600S Radioactive Based Instrument Maintenance |
| Work Category's DeSIription | : | The provision of labour, consumables, equipment and facilities necessary for testing, calibration, repair, replacement, transportation and removal of Radioactive Based Instrument |
| Mode of Operation | : | Self-Operated |

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------|---------------|------------|-------------------------------|------------|----------------------|---------------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | | Business License from Local Authority | Radiation Safety Management System | | | |
| | | | | | | 2.AELB Class A | | | | |

| Work Category | : | Instrumentation & Control Equipment and Services Field Instruments 20171100P Fire & Gas Detectors |
|-----------------------------|---|---|
| Work Category's DeSIription | : | To supply and deliver Fire & Gas Detectors such as but not limited to Gas Detector, Smoke Detector, Fire/Heat Detector, Ultra Violet and Infra Red Flame Detector and Visual Flame Detector |
| Mode of Operation | : | Agent |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|--|-------------------------------|------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | Principal to have minimum 10 years experience in Fire & Gas Detectors related works in oil and gas industry (e.g. Gas Detector, Fire/Heat Detector, Utra Violet & Infra Red Flame Detector, Visual Flame Detector) | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services | | | | | |
|-----------------------------|---|--|---|--|--|--|--|--|
| | | | Field Instruments | | | | | |
| | | 20171200P | Flow Instruments | | | | | |
| | | | | | | | | |
| Work Category's DeStription | : | | rocure, supply, deliver, install, hook up, test, commission and training of Flow Instruments such as but not limited to Orifice Bodies (Fittings, | | | | | |
| | | Flanges, Plates), Cone Meter, Coriolis, Electronic Flow Recorder, Flow Computers, Flow Nozzle, Flow Switches, Flow Transmitter, Magnetic, Pitot/Annubar, Pneumatic | | | | | | |
| | | Flow/Temperature/Pre | ssure Recorder, Positive Displacement Flow Meter, Rotameter, Sight Flow Indicators, Thermal Mass Flow Meter, Turbine Flowmeters, Ultrasonic | | | | | |
| | | Towns Mantered Today M. | Towns Makes New accounting a Flow Makes at | | | | | |

Type, Venturi Tube, Vortex, Target Meter, Non-conventional Flow Meter, etc.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|-----------------------------|------------|---|---------------------------------|------------------------|--|--|--|
| Key Personnel | | | Facilities | Equipment | | External Body | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 5 years experience in flow instruments related works in oil and gas industry | | | | | |

| Work Category | : | 20171300P | Instrumentation & Control Equipment and Services Field Instruments Level Instruments |
|-----------------------------|---|------------------------|--|
| Work Category's DeStription | : | Gauges/Glasses & Cocks | ure, assemble, supply, deliver, install, hook up, test, commission and training of Level Instruments such as but not limited to Level , Capacitance/Resistance Type, Differential Pressure Type, Displacement Type, Float Operated Type, Level Switches, Level Transmitter, pe, Nucleonic Type and Tuning Fork |

| Mode of Operation | : | Agent |
|-------------------|---|-------|
|-------------------|---|-------|

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|-----------------------------|----------------------|--|---------------------------------|------------------------|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | Principal to have minimum 5 years experience in level instruments related works in oil and gas industry. | | | | |

Work Category : Instrumentation & Control Equipment and Services
Field Instruments
20171400P Machine Monitoring Sensors

Work Category's DeStription : To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Machine Monitoring Sensors

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------|-------------------------------|--|-----------------------------|-----------------|--|-------------------------------|------------------------|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | Minimum 5 years of experience in vibration monitoring sensor/system related works | | Calibration kit | Minimum 5 years experience in supply, engineering and installation of machine monitoring sensors instruments in O&G | | | | | |
| | mechatronics / automation | Minimum 5 years of experience in vibration monitoring sensor/system related works | | | industry | | | | | |

Work Category : Instrumentation & Control Equipment and Services
Field Instruments
20171400P Machine Monitoring Sensors

Work Category's DeStription : To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Machine Monitoring Sensors

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---|--|----------------------|-------------------------------|--|-----------------|------------------------|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Ů | Degree in relevant Engineering discipline/field Diploma or certificates in | Minimum 5 years of experience in vibration monitoring sensor/system related works Minimum 5 years of | | Calibration kit | Minimum 5 years experience in supply, engineering and installation of machine monitoring sensors instruments in O&G industry | | |
| | | experience in vibration | | | | | |

| Work Category | : | Instrumentation & Control Equipment and Services Field Instruments 20171600P Pressure Instruments |
|-----------------------------|---|---|
| Work Category's DeSIription | : | To supply and deliver Pressure Instrument such as but not limited to Pressure/DP Transmitter (inclusive conventional, HART and/or fieldbus, wireless), Pressure/DP Switches, Pressure Gauge, Pressure Transducers, etc. |
| Mode of Operation | : | Agent |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------|-------------------------------|------------|-----------------------------|----------------------|--|-------------------------------|------------------------|--|--|--|
| | Key Personnel | | | Facilities Equipment | Oda Eda | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 5 years experience in pressure instruments related works in oil and gas industry | | | | | |

| Work Category | : | Instrumentation & Control Equipment and Services Field Instruments 20171700P Temperature Instruments |
|-----------------------------|---|--|
| Work Category's DeStription | : | To design, engineer, procure, supply and deliver Temperature Instruments such as but not limited to Temperature Transmitters (inclusive conventional, HART and/or fieldbus, wireless), Temperature Switches, Thermowells, Temperature Gauge and Temperature Sensor/Element (Thermocouple/RTD/others) |
| Mode of Operation | : | Agent |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------|-------------------------------|------------|-----------------------------|----------------------|---|-------------------------------|------------------------|--|--|--|
| | Key Personnel | | | Facilities Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 5 years experience in temperature instruments related works in oil and gas industry | | | | | |

Work Category : Instrumentation & Control Equipment and Services
Field Instruments
20171800P Weighing & Measuring Metering & Sales System - Multiphase Metering

: To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Multiphase Metering

Mode of Operation : Agent

Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------------------|----------------------|---|-----------------|------------------------|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Multiphase Metering related works | | | | | |

Instrumentation & Control Equipment and Services General Instrument Accessories Fittings & Tubings Work Category :

20181000P

To supply and deliver Instrument Fittings & Tubings Work Category's Description

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------------------|----------------------|-------------------------------|--|-----------------|------------------------|--|--|
| Key Personnel | | Facilities Equipment C | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | Principal to have minimum 10 years experience in instrument fittings/tubings related works in oil and gas industry | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|-----------------------------|---|-----------|---|
| | | 20190000S | General Instrument Maintenance |
| Work Category's DeSIription | : | | naterials, consumables, equipment and facilities necessary for design, repair, upgrading, change out/replacement, modification, maintenance, nd commissioning of general instrument maintenance |

Mode of Operation : Self-Operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|--|--|--|---|----------------------|-------------------------------|------------------------|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | Degree in relevant Engineering field | Minimum 3 years experience in general instrument maintenance | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for | | | | | |
| Technician | Certificate in relevant engineering field | Minimum 5 years experience in general instrument maintenance | | diagnostic | | | | | |

Instrumentation & Control Equipment and Services Machinery Condition Monitoring System Work Category

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Machinery Condition Monitoring System inclusive of probes, cables and transducers Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|--|--|------------------------|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 10 years experience in 0&G Machinery Condition Monitoring System related works | System (MMS) shall be TUV Rhineland certified | | | | |

Instrumentation & Control Equipment and Services Process Control & Monitoring System Distributed Control System (DCS) Work Category :

20231000P

To design, engineer, assemble, supply, deliver, install, hook up, test, commission and training of Distributed Control System (DCS) Work Category's Description

Mode of Operation

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|----------|------------------------|--|-------------------------------|------------------------|--|--|
| | Key Personnel | | | Facilities Equipment C | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | Principal to have minimum 10 years experience in O&G DCS related works | | | | |

Instrumentation & Control Equipment and Services Process Control & Monitoring System SCADA System/Telemetry Work Category :

20231100P

To design, engineer, assemble, supply, deliver, install, hook up, test, commission and training of SCADA System/Telemetry Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------|-------------------------------|------------|----------|-------------------------|---|-------------------------------|------------------------|--|--|--|
| | Key Personnel | | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 10 years experience in O&G SCADA System/Telemetry related works | | | | | |

Work Category : Instrumentation & Control Equipment and Services
2025000P Sampling System

Work Category's Description : To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission Sampling System for metering and manual sampling including multiphase sampler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|----------------------|----------|----------------------|--|-----------------|------------------------|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company C Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | Principal to have minimum 10 years experience in O&G Sampling System | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|---------------|---|-----------|--|
| | | | Systems Maintenance |
| | | 20261200S | DCS & PLC |
| | | | |

Work Category's DeSIription :

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, refurbish, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Digital Control System (DCS) and Programmable Logic Controller (PLC)

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---------------------------------------|---|----------------------------|---|---|-----------------|------------------------|
| | Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in any Engineering field | | office setup 2.Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | Principal to have minimum 10 years experience in O&G DCS & PLC related works | | |
| | Trained and certified by Principal | Minimum 5 years experience in DCS & PLC servicing | | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|-----------------------------|---|-----------|---|
| | | | Systems Maintenance |
| | | 20261200S | DCS & PLC |
| Work Category's DeSIription | : | | naterials, consumables, equipment and facilities necessary for cleaning, repair, refurbish, upgrading, change out/replacement, modification, ting, testing and commissioning of Digital Control System (DCS) and Programmable Logic Controller (PLC) |

Mode of Operation : Self-Operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|---------------|---|---|---|----------------------|---------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Equipment Co | | Company's Experience | External Body | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | | | | Hand tools Calibrators Test Equipment Software / Tools for diagnostic | | | |
| Technician | | Minimum 5 years experience in DCS & PLC servicing | | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|---------------|---|-----------|--|
| | | | Systems Maintenance |
| | | 20261400S | Safeguarding/Safety System |
| | | | |

Work Category's DeSIription : The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, refurbish, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Safeguarding/Safety System

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---------------------------------------|---|--|---|---|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in any Engineering field | experience in | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | Principal to have minimum 10 years experience in O&G Safeguarding / Safety System related works | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Safeguarding / Safety System servicing | | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|---------------|---|-----------|--|
| | | | Systems Maintenance |
| | | 20261400S | Safeguarding/Safety System |
| | | | |

Work Category's DeStription : The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, refurbish, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Safeguarding/Safety System

Self-Operated

Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|------------------------------------|---|--|---|----------------------|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | Degree in any Engineering field | Minimum 3 years experience in Safeguarding / Safety System and Sub System Integration, configuration and troubleshooting | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| Technician | N/A | Minimum 5 years experience in Safeguarding / Safety System servicing | | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|---------------|---|-----------|--|
| | | | Systems Maintenance |
| | | 20261600S | Turbo Machineries Instrument |
| | | | |

Work Category's DeSIription : The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, refurbish, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Turbo Machineries Instrument

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---------------------------------------|--|----------------------------|---|--|-----------------|------------------------|
| | Key Personnel | | Facilities Equipment Cor | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in any Engineering field | experience in Turbo | office setup 2.Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | Principal to have minimum 10 years experience in Turbo Machineries Instrument related works | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Turbo Machineries Instrument system servicing | | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|---------------|---|-----------|--|
| | | | Systems Maintenance |
| | | 20261600S | Turbo Machineries Instrument |
| | | | |

Work Category's DeStription : The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, refurbish, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Turbo Machineries Instrument

| Mode of Operation | : | Self-Operated |
|-------------------|---|---------------|
|-------------------|---|---------------|

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|------------------------------------|---------------|---|--|---|-------------------------------|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | | Minimum 3 years experience in Turbo Machineries Instrument System Integration, configuration and troubleshooting | Manned and permanent office setup Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Software / Tools for diagnostic | | | |
| Technician | | Minimum 5 years experience in Turbo Machineries Instrument system servicing | | | | | |

| Work Category | : | | Instrumentation & Control Equipment and Services Certification & Consultancy Services |
|---------------|---|-----------|---|
| | | 20101000S | Calibration of Measurement System |
| | | | |

Work Category's DeSIription : The provision of labour, consumables, equipment and facilities related to testing, calibration and validation such as metering system and equipment used for such work for trade purposes is to be traceable to national and international standard

Self-Operated Mode of Operation

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------------------------|---------------|------------|-----------------------------|----------------------|-------------------------------|-----------------|------------------------|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | |
| | | | | | | SIRIM certified | | |

| Work Category | : | | Instrumentation & Control Equipment and Services |
|---------------|---|-----------|--|
| | | | Systems Maintenance |
| | | 20261300S | Fire & Gas Detection & Alarm System |
| | | | |

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, refurbish, upgrading, change out/replacement, modification, maintenance, troubleshooting, testing and commissioning of Fire & Gas Detection & Alarm System including but not limited to smoke and heat detection, infra-red heat detection, flammable and toxic gas detection and alarm panels Work Category's DeSIription

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------------------------|---------------|-------------------------------|-----------|----------------------|-------------------------------|--|------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | |
| | | | | | | Fire & Gas System (FGS) shall be SIL2 (Safety Integrity Level) certified | | |

Instrumentation & Control Equipment and Services Control Panels Wellhead Control Panel Work Category :

20111200P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Wellhead Control Panel Work Category's Description

Mode of Operation System Integrator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------------------|--|---|---|---|----------------------|---|------------------------|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| Technical Manager | Degree in any Engineering field | Minimum 5 years experience in Wellhead Control Panel production | 1. Office setup 2. Assembling facility 2. Treating facility | 1.Lifting equipment 2.Computer | | 1.Business License from Local Authority 2 DOSH – "Surat | | | | |
| Project /Field Service Engineer | Degree in any Engineering field and trained & certified from Principal | | 3.Testing facility 4.Staging Area 5.Training Facility | Aided Design (CAD) software 3.Emulator/ Simulator for logic testing & configuration 4.Multi Meter | | Z.DUSH – Surat Kebenaran Operasi" | | | | |
| System Engineer | Degree in any Engineering and trained & certified from Principal | Minimum 5 years experience in Wellhead Control Panel design | | 5.Hand tools | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | | | | |

Instrumentation & Control Equipment and Services Control Panels Wellhead Control Panel Work Category :

20111200P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Wellhead Control Panel Work Category's Description

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|--|---|--|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | | | E.g. CIDB, DOSH | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience in Wellhead Control Panel production | Office setup Manufacturing facility Testing facility | Heavy lifting equipment Test Equipment Programmable | | 1.Business License from Local Authority 2.DOSH – "Surat | |
| Project /Field Service Engineer | Degree in any Engineering field and trained & certified from Principal | | 4. Training Facility | Logic & Hydraulic Test Equipments 4.Computer Aided | | Kebenaran Operasi" | |
| Design Engineer | Degree in any Engineering and trained & certified from PrincipalDegree in any Engineering field | Minimum 5 years experience in Wellhead Control Panel designMinimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | Design (CAD) software | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R& D Engineer | Degree in any Engineering and trained & certified from Principal | Minimum 5 years experience in Wellhead Control Panel design | | | | | |

Instrumentation & Control Equipment and Services Control Panels Wellhead Control Panel Work Category :

20111200P

To design, engineer, procure, assemble, supply, deliver, install, hook up, test, commission and training of Wellhead Control Panel Work Category's Description

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company C Expendico | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in 0&G Wellhead Control Panel related works | | | | | | |

Work Category : Logistics & Warehousing
Aviation
21101400S Fixed Wing Services

Work Category's Description : The provision of manpower, equipment, facilities and services for fixed wing operation and maintenance including ground handling

Mode of Operation : Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---|---|---|--------------------------------------|------------|----------------------|--|------------------------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Base Manager | Degree in any discipline and/or a licensed pilot/engineer in aviation industry | Minimum 3 years' experience in managing fixed-wing operations | Manned and permanent office setup | | | Registered with Dept. of Civil Aviation (DCA) Malaysia with Air Operators Certificate (AOC) | | | | | |
| Chief Pilot | Valid Airline Transport Pilot License (ATPL) | Flying instructor and examiner experience with minimum 3 years experience in managing /supervisory position | | | | | | | | | |
| | Degree or license aircraft engineer in B1.1 (Mechanical - Aircraft Turbines) and B2 (Avionics) | Minimum 5 years experience in supervisory role | | | | | | | | | |
| Safety Management System (SMS) Manager | Degree in any engineering discipline or License in Aircraft engineer/pilot | Minimum 5 years experience in QA/safety management functions | | | | | | | | | |

Work Category : Logistics & Warehousing
Aviation
21101500S Helicopter Services

Work Category's Description : The provision of manpower, equipment, facilities and services for helicopter operation and maintenance including ground handling

Mode of Operation : Self-operated

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|---|---|--|-------------------------|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | · | | | _ |
| Base Manager | | | Manned and permanent office setup | | | Registered with Dept. of Civil Aviation (DCA) Malaysia with Air Operators Certificate (AOC) | |
| Chief Pilot | Valid Airline Transport Pilot License (ATPL) | Flying instructor and examiner experience with minimum 3 years experience in managing /supervisory position | | | | | |
| Technical Support Manager | Degree or license aircraft engineer in B1.3 (Mechanical - Helicopter Turbines) and B2 (Avionics) | Minimum 5 years experience in supervisory role | | | | | |
| Quality Assurance (QA) & Safety Management System (SMS) Manager | Degree in any engineering discipline or License in Aircraft engineer/pilot | Minimum 5 years experience in QA/safety management functions | | | | | |

Work Category : Logistics & Warehousing Marine Marine Operations Services Classification Society Survey

211212115

Work Category's Description : The provision of carrying out classification for offshore structure

Mode of Operation : Self-operated

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|-------------------------------|--|--------------------------|---|----------------------|----------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Expensive | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | preferably Naval Architecture | offshore structure clasification i.e: FSO, FPSO, FPS etc | Proper office setup | The company to provide the list of engineering workstation / hardware and relevant software and program to conduct classification .*Company to provide list of software(s) and copy of the software license(s). | | | |

Work Category : Logistics & Warehousing
Marine
Marine Transportation
Accommodation Work/Construction

Work Category's Description : The provision of Accommodation Work/Construction Boat/Barge including personnel to accommodate work personnel and crew with a degree of comfort and safety, with deck space or materials work area and crane for Self-propelled Accommodation Vessel/Floatel/Work Boat and Non-propelled Accommodation/Construction/Barge

Mode of Operation : Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|--|---|--|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | | L.g. 100, Al Totalidard | | | | |
| | | | office setup | One valid exclusive appointment letter from Principal for one year 2. List of vessel / floatel / work boat/construction/ barge | | Principal must provide following document: 1.Certificate Registry of Vessel | | | | | |

Work Category : Logistics & Warehousing
Marine
Marine Transportation
21121510S Accommodation Work/Construction

Work Category's Description : The provision of Accommodation Work/Construction Boat/Barge including personnel to accommodate work personnel and crew with a degree of comfort and safety, with deck space or materials work area and crane for Self-propelled Accommodation Vessel/Floatel/Work Boat and Non-propelled Accommodation/Construction/Barge

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---------------|--|--------------------------|--|-----------------------------------|---|------------------------|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard |
| | | | , | Letter of appointment from Owner to operator for each vessel to operate 2. List of vessel / floatel / work boat/construction/ barge | | Vessel Operator must provide following document: 1. Certificate Registry of Vessel | |

Logistics & Warehousing Marine Marine Transportation Accommodation Work/Construction Work Category 21121510S

Work Category's Description The provision of Accommodation Work/Construction Boat/Barge including personnel to accommodate work personnel and crew with a degree of comfort and safety, with deck space or materials work area and crane for Self-propelled Accommodation Vessel/Floatel/Work Boat and Non-propelled Accommodation/Construction/Barge

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|--|--|-------------------------|--|---|--|---|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Operational Manager / | Master Mariner or Marine Engineer Unlimited | 5 years in Oil and Gas | | List of own vessel/floatel/ work boat | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of | Compliance to: 1. Offshore Vessel Management Self Management Self Assessment (OVMSA) - Minimum Level 1, verified by MISC Maritime Services Sdn. Bhd. (MMSSB) 2. International Safety Management Code (ISM) incorporating oil and gas industry Health. Safety and Environment Management System (HSE MS) elements |

Logistics & Warehousing Marine Marine Transportation Anchor Handling Tug (AHT)/Anchor Handling Tug & Supply (AHTS)/Tow Tug Boat Work Category 21121511S

Work Category's Description The provision of AHT/AHTS/Tow Tug Boat including but not limited to personnel to supply oil rigs, transport liquid/bulk cargo, stores, materials and equipment, tow oil rigs to location, anchor oil rig and serve as an emergency rescue and recovery vessel (ERRV)

Vessel Owner Operator Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|--|--|--|------------------------------------|---|--|---|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Operational Manager / | Master Mariner or Marine Engineer Unlimited | 5 years in Oil and Gas | Manned Ship Management office setup | 1.List of own AHT/AHTS/Tug Boat | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of | Compliance to: 1. Offshore Vessel Management Self Assessment (OVMSA) - Minimum Level 1, verified by MISC Maritime Services Sdn. Bhd. (MMSSB) 2. International Safety Management Code (ISM) incorporating oil and gas industry Health, Safety and Environment Management System (HSE MS) elements |

Logistics & Warehousing Marine Marine Transportation Diving Support Vessel Work Category 21121512S

Work Category's Description The provision of Diving Support Vessel including personnel used as a floating base for professional diving projects below or around oil production platforms and associated installations. The vessel can be fitted with dynamic positioning system (DP)

Mode of Operation Agent

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|--------------------------|---|---|---|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard |
| | | | office setup | 1. One valid exclusive appointment letter from Principal for one year 2. List of vessel | | Principal must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonage Tonage Management Certificate (SMC) for above 500 Gross Tonage 4. Vessel Specification | |

Logistics & Warehousing Marine Marine Transportation Diving Support Vessel Work Category 21121512S

Work Category's Description The provision of Diving Support Vessel including personnel used as a floating base for professional diving projects below or around oil production platforms and associated installations. The vessel can be fitted with dynamic positioning system (DP)

Vessel Operator Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|--|---|--|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | E.g. 100is | | | E.g. 150, AFI Standard | | | | | |
| | | | | 1.Letter of appointment from Owner to operator for each vessel to operate 2.List of vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage 4.Vessel Specification | | | | | | |

Work Category : Logistics & Warehousing
Marine
Marine Transportation
21121512S Diving Support Vessel

Work Category's Description : The provision of Diving Support Vessel including personnel used as a floating base for professional diving projects below or around oil production platforms and associated installations. The vessel can be fitted with dynamic positioning system (DP)

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|--|----------------------|---|---|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.g. 10013 | | | E.g. 130, AFI Standard |
| | | | Manned Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tornage 3. Safety Management Certificate (SMC) for above 500 Gross Tornage 4.Vessel Specification | |

Work Category : Logistics & Warehousing
Marine
Marine Transportation
21121513S Dumb/Flat Top/Transportation Barge

Work Category's Description : The provision of Dumb/Flat Top/Transportation Barge including personnel to transport materials and equipments. It is a long, large, usually flat-bottomed barge, generally designed with absence of its own means of mechanical propulsion and to be towed or pushed by other craft, such as tug boat.

Mode of Operation : Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|---|---|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment | Equipment E.g. Tools Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOON | E.g. 130, AFI Standard | | | | |
| | | | office setup | 1. One valid exclusive appointment letter from Principal for one year 2. List of barge | | Principal must provide follow documents: 1.Certificate Registry of Vessel 2.Vessel / barge Specification | | | | | |

Work Category : Logistics & Warehousing
Marine
Marine Transportation
21121513S Dumb/Flat Top/Transportation Barge

Work Category's Description : The provision of Dumb/Flat Top/Transportation Barge including personnel to transport materials and equipments. It is a long, large, usually flat-bottomed barge, generally designed with absence of its own means of mechanical propulsion and to be towed or pushed by other craft, such as tug boat.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|---|--------------------------|--|-----------------------------------|---|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | L.g. Harenouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 130, AFI Statidard | | | | |
| | | | · · | Letter of appointment from Owner to operator for each vessel to operate List of vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Vessel / barge Specification | | | | | |

| Work Category | : | | Logistics & Warehousing |
|---------------|---|-----------|------------------------------------|
| | | | Marine |
| | | | Marine Transportation |
| | | 21121513S | Dumb/Flat Top/Transportation Barge |
| | | | |

Work Category's Description : The provision of Dumbl/Flat Top/Transportation Barge including personnel to transport materials and equipments. It is a long, large, usually flat-bottomed barge, generally designed with absence of its own means of mechanical propulsion and to be towed or pushed by other craft, such as tug boat.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|-------------------------------------|----------------------|---|---|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. 6155, 50611 | E.g. 130, AFI Standard | | | |
| | | | Manned Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel 2. Vessel / barge Specification | | | | |

 Work Category
 :
 Logistics & Warehousing Marine

 Marine Transportation
 21121514S
 Fast Crew Boat/Supply Crew Boat

Work Category's Description : The provision of Fast Crew Boat/Supply Crew Boat including personnel to provide personnel transportation from base to / from offshore location or within fields such as but not limited to Surfer

peration : Vessel Owner Operator

Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|--|---|-------------------------------------|---------------------------|-------------------------------------|---|--|---|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Beerlyana | L.g. 100.0 | | 2.g. 0.52, 500.1 | 2.9.100,74.1014114414 |
| Operational Manager / Technical Manager | Master Marine or Marine Engineer Unlimited | 5 years in Oil and Gas | | List of own fast / supply crew boat | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of | Compliance to: 1. Offshore Vessel Management Self Assessment (OVMSA) - Minimum Level 1, verified by MISC Maritime Services Sdn. Bhd. (MMSSB) 2. International Safety Management Code (ISM) incorporating oil and gas industry Health, Safety and Environment Management System (HSE MS) elements |

Work Category : Logistics & Warehousing
Marine
Marine Transportation
21121515S Landing Craft Tank

Work Category's Description : The provision of Landing Craft Tank including personnel, specially designed to be flat-bottomed for transportation and supply of food, water and oil

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---|--|--|---|-----------------------------------|---|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | | | | | |
| | Master Marine or Marine Engineer Unlimited | 5 years in Oil and Gas | Manned Ship Management office setup | 1.List of own Landing Craft Tank | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society | Compliance to: 1. Offshore Vessel Management Self Assessment (OVMSA) Mirimum Level 1, verified by MISC Martime Services Sdn. Bhd. (MMSSB) 2. International Safety Management Code (ISM) incorporating oil and gas industry Health, Safety and Environment Management System (HSE MS) elements |

Logistics & Warehousing Marine Marine Transportation Platform Supply Vessel Work Category 21121518S

The provision of Platform Supply Vessel including personnel to transport liquid/bulk cargo, stores, materials and equipment, or to transport personnel and materials between platforms and drilling rigs. The vessel is normally used for deepwater operations Work Category's Description

Vessel Owner Operator Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|--|--|--|------------------------------------|---|--|---|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Operational Manager / | | 5 years in Oil and Gas | Manned Ship Management office setup | List of own platform supply vessel | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of | Compliance to: 1. Offshore Vessel Management Self Assessment (OVMSA) - Minimum Level 1, verified by MISC Maritime Services Sdn. Bhd. (MMSSB) 2, International Safety Management Code (ISM) incorporating oil and gas industry Health, Safety and Environment Management System (HSE MS) elements |

Logistics & Warehousing Marine Marine Transportation Safety Standby/General Purpose/Utility Vessel Work Category 21121519S

The provision of Safety Standby Vessel including personnel at location or within field to provide assistance to emergency demobilization of offshore crew in the event of rig. platform, MODU, MOPU or offshore facilities being abandoned. General Purpose / Utility Vessel including personnel for transporting goods, personnel between platforms, standby boat and chaser boat Work Category's Description

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---|--|--|---|---|--|---|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | L.g. Warenouse, Dockyaru | • | | L.g. ODB, DOON | L.g. 100, Ai i otandard |
| | Master Marine or Marine Engineer Unlimited | 5 years in Oil and Gas | Manned Ship Management office setup | 1.List of own Safety Standby / General Purpose / Utility Vessel | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of | Compliance to: 1. Offshore Vessel Management Self Assessment (OVMSA) - Mirimum Level 1, verified by MISC Martimes Services Sdn. Bhd. (MMSSB) 2. International Safety Management Code (ISM) incorporating oil and gas industry Health, Safety and Environment Management System (HSE MS) elements |

 Work Category
 :
 Logistics & Warehousing Marine

 Marine Transportation
 21121520S
 Straight Supply Vessel

Work Category's Description : The provision of Straight Supply Vessel including personnel to transport liquid / bulk cargo, stores, materials and equipment, or to transport personnel and materials between platforms / rigs

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|--|---|--|--|---|---|---|---|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | 9 | | L.g. ODB, DOON | L.g. 100, Ai i otalidard |
| Operational Manager / Technical Manager | Master Marine or Marine Engineer Unlimited | 5 years in Oil and Gas | Manned Ship Management office setup | 1.List of own straight supply vessel | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of | Compliance to: 1. Offshore Vessel Management Self Assessment (OVMSA) - Minimum Level 1, verified by MISC Maritime Services Sdn. Bhd. (MMSSB) 2. International Safety Management Code (ISM) incorporating oil and gas industry Health, Safety and Environment Management System (HSE MS) elements |

Logistics & Warehousing Marine Marine Transportation Tug Vessel Work Category

21121521S

Work Category's Description : The provision of Offshore and/or Harbour Tug / Vessel including personnel to assist tankers / commercial vessel during off-take (FPSO or FSO).

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---|------------------------|--|--------------------------|---|--|---|
| Key Personnel | | | Facilities Equipment (| Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | | | | | |
| | Master Marine or Marine Engineer Unlimited | 5 years in Oil and Gas | Manned Ship Management office setup | 1.List of own tug vessel | | documents: 1. Certificate Registry of Vessel from Malaysian Ship Registry 2. Document of Compliance (DOC) 3. Safety Management Certificate (SMC) 4. Vessel shall be registered with classification society which is member of | Compilance to: 1. Offshore Vessel Management Self Assessment (OVMSA) - Minimum Level 1, verified by MISC Maritime Services Sdn. Bhd. (MMSSB) 2. International Safety Management Code (ISM) incorporating oil and gas industry Health, Safety and Environment Management System (HSE MS) elements |

 Work Category
 :
 Logistics & Warehousing

 Marine
 Ship

 21121710S
 Bulk Carrier

Work Category's Description : The provision of Bulk Carrier and personnel for transportation, storage of bulk materials

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|---|---|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, Art Standard | | | | |
| | | | setup | Letter of appointment from Owner to operator for each operated vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage | | | | | |

 Work Category
 :
 Logistics & Warehousing Marine Ship

 21121710S
 Bulk Carrier

Work Category's Description : The provision of Bulk Carrier and personnel for transportation, storage of bulk materials

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|------------------------------|----------------------|---|---|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | | | |
| | | | Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel: 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | | | | | | |

Work Category's Description : The provision of chemical tankers and personnel for transportation, storage of chemical products

Mode of Operation : Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------|---------------------------------|---|-----------------------------------|-----------------|--------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 100is | | E.g. CIDB, DOON | L.g. 100, Al l'Otalidard | | | | |
| | | | Ship Management office setup | 1.One valid exclusive appointment letter from Principal for one year 2.List of related vessel from Principal | | | | | | | |

 Work Category
 Logistics & Warehousing

 Marine
 Ship

 21121711S
 Chemical Tankers

Work Category's Description : The provision of chemical tankers and personnel for transportation, storage of chemical products

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|-------------------------------------|--------------------------|---|---|--|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Statidard |
| | | | setup | Letter of appointment from Owner to operator for each operated vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.00 (Operation of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

Work Category's Description : The provision of chemical tankers and personnel for transportation, storage of chemical products

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|------------|---------------------------------|----------------------|---|--|-------------------------|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Statidard |
| | | | Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

Logistics & Warehousing Marine Ship Crude Oil Tanker Work Category

21121712S

Work Category's Description : The provision of crude oil tankers and personnel for transportation, storage of crude oil

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|------------------------------|---|---|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | |
| | | | Ship Management office setup | 1.One valid exclusive appointment letter from Principal for one year 2.List of related vessel from Principal | | | | | | | |

Logistics & Warehousing Marine Ship Crude Oil Tanker Work Category

21121712S

Work Category's Description : The provision of crude oil tankers and personnel for transportation, storage of crude oil

Mode of Operation Vessel Operator

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|-------------------------------------|-------------------------|---|---|---|----|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | , , | • | | | 3, |
| | | | setup | Letter of appointment from Owner to operator for each operated vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

 Work Category
 Logistics & Warehousing

 Marine
 Ship

 21121712S
 Crude Oil Tanker

Work Category's Description : The provision of crude oil tankers and personnel for transportation, storage of crude oil

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|------------------------------|----------------------|---|--|--------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.g. 10015 | | E.g. CIDB, DOSH | E.g. 150, AFI Statituaru |
| | | | Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

 Work Category
 Logistics & Warehousing

 Marine
 Ship

 21121713S
 Liner/Container Vessel

Work Category's Description : The provision of Liner / Container Vessel and personnel for transportation, storage of container

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------------|-------------------------------|--------------------------|---|----------------------|---|-----------------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 10015 | | | E.g. 150, AFI Statidard | | | | | |
| | | setup | Letter of appointment from Owner to operator for each operated vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage | | | | | | |

 Work Category
 :
 Logistics & Warehousing

 Marine
 Ship

 21121713S
 Liner/Container Vessel

Work Category's Description : The provision of Liner / Container Vessel and personnel for transportation, storage of container

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|---------------------------------|----------------------|---|--|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Beerlyana | 2.g. 100.0 | | E.g. 6100, 20011 | E.g. 150, AFI Staticalu |
| | | | Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

Logistics & Warehousing Marine Ship LNG Tankers Work Category

211217148

Work Category's Description The provision of LNG tankers and personnel for transportation, storage of LNG products

Mode of Operation Vessel Operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------------|--------------------------|---|---|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.g. 100is | | | E.g. 150, AFI Standard | | | | |
| | | | setup | Letter of appointment from Owner to operator for each operated vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage | | | | | |

Work Category's Description : The provision of LNG tankers and personnel for transportation, storage of LNG products

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|------------|---------------------------------|----------------------|---|--|-------------------------|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Statidard |
| | | | Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

Logistics & Warehousing Marine Ship LPG Tankers Work Category

21121715S

Work Category's Description The provision of LPG tankers and personnel for transportation, storage of LPG products

Mode of Operation Vessel Operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------------|--------------------------|---|---|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.g. 100is | | | E.g. 150, AFI Standard | | | | |
| | | | setup | Letter of appointment from Owner to operator for each operated vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage | | | | | |

Work Category's Description : The provision of LPG tankers and personnel for transportation, storage of LPG products

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------------------------|---------------|------------|--|-------------------------|----------------------|---|-----------------------------------|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.y. 100IS | | E.g. CIDB, DOSH | E.g. 150, AFT Standard |
| | | | Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel: 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

 Work Category
 :
 Logistics & Warehousing Marine Ship

 21121716S
 Petroleum Product Tankers

Work Category's Description : The provision of Petroleum Product tankers and personnel for transportation, storage of Petroleum Product

Mode of Operation : Agent

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|------------|------------------------------|---|---|-----------------------------------|-------------------------|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. 6100, 00011 | L.g. 100, Ai Totalidard |
| | | | Ship Management office setup | 1.One valid exclusive appointment letter from Principal for one year 2.List of related vessel from Principal | | | |

 Work Category
 :
 Logistics & Warehousing Marine Ship

 21121716S
 Petroleum Product Tankers

Work Category's Description : The provision of Petroleum Product tankers and personnel for transportation, storage of Petroleum Product

Mode of Operation : Vessel Operator

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|--------------------------|---|---|---|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Standard |
| | | | setup | Letter of appointment from Owner to operator for each operated vessel | | Vessel Operator must provide follow documents: 1.Certificate Registry of Vessel 2.Document of Compliance (DOC) for above 500 Gross Tonnage 3.Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

 Work Category
 :
 Logistics & Warehousing

 Marine
 Ship

 21121716S
 Petroleum Product Tankers

Work Category's Description : The provision of Petroleum Product tankers and personnel for transportation, storage of Petroleum Product

Mode of Operation : Vessel Owner Operator

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---------------|------------|-------------------------------------|-------------------------|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | L.g. 10013 | | | L.g. 100, Ai Totalidard |
| | | | Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: 1. Certificate Registry of Vessel 2. Document of Compliance (DOC) for above 500 Gross Tonnage 3. Safety Management Certificate (SMC) for above 500 Gross Tonnage | |

Work Category : Logistics & Warehousing
Storage & Packing
21131400P Form Filled Seal & Hoods

Work Category's Description : To design, supply and deliver form filled seal & hoods (i.e. shrink hoods, stretch hoods and cover hoods)

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|--------------------|---|--|---|-------------------------|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | - | 2.g. 100.0 | | | Ligitios, 74 Fotandara |
| Production Manager | Degree in any Engineering field Or Diploma in any Engineering field | | 1.Office Building 2. Production Line / Processing Plant | | | Business License from local authority Member of Malaysian Plastic Manufacturer Association | |
| Technical Manager | Engineering / Chemistry | Minimum 5 years experience in polymer / plastic application industry | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC | | | | | |

Logistics & Warehousing Warehouse & Supply Base Equipment and Services Supply Base Supply Base Leasing/Rental

Work Category's Description : Lease or rental of supply base for warehouse, storage, office.

21141110S

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------------------|--|---|---|----------------------------------|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration E.g. CIDB. DOSH | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| General Manager - Operations | Degree in any discipline | 10 years experiences in port operation | Adequate land facing sea- front | Mechanical handling equipment | | Approved Supply Base License from Ministry of | | | | | |
| Operations Manager | Degree in any discipline | 5 years experiences in port operation | Berthing with minimum of | Cargo handling equipment | | Finance | | | | | |
| Technical Manager | Diploma in any discipline | 5 years experiences in port operation | following facilities: i) Fuel bunkering | | | Approved bonded area for Oil & Gas from Royal | | | | | |
| HSE Manager | Degree in any discipline | 3 years experience in port operation | ii) Water supply iii) Food cargo handling | | | Malaysian Customs | | | | | |
| Security Manager | Diploma in any discipline or equivalent or ex-armed forces | 2 years experience in port operation | iv) Open space for transit | | | | | | | | |

Logistics & Warehousing Land Cargo Transport & Freight Forwarding Services Air Cargo Transport

21111010S

Work Category's Description : The provision of manpower, equipment, facilities and services for Air Cargo Transport

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | | |
| | | | | | | "Lesen Pembawa A" by LPKP-Lembaga Pelesenan Kenderaan Perdagangan (under the company's name) | | | | | | | |

Logistics & Warehousing Land Cargo Transport & Freight Forwarding Services Freight Forwarding Services

21111011S Work Category's Description :

The provision of freight forwarding services related to facilitate product delivery process such as but not limited to preparation of documents for customs declaration, customs clearance inclusion of pallet furnigation for both upstream and downstream

Self-operated Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|--------------------------|----------------------|---|---|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | E.g. Tools | | E.g. CIDB, DOSH | E.g. 130, AFI Standard |
| | | | | | | Royal Malaysian Customs Department – "Surat Kelulusan menjadi Agen Penghantaran" | |

Logistics & Warehousing Land Cargo Transport & Freight Forwarding Services Marine Cargo Transport 21111012S

Work Category's Description : The provision of manpower, equipment, facilities and services for Marine Cargo Transport

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--|---------------------------|----------------------|---|---|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warerlouse, Dockyaru | E.g. Tools | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | | |
| | | | | | | "Lesen Pembawa A" by LPKP-Lembaga Pelesenan Kenderaan Perdagangan (under the company's name) | | | | | | |

Work Category : Logistics & Warehousing Land Land Transportation Passenger Vehicle

21111111S

Work Category's Description : The provision of Passenger Vehicle Services using bus, van and car

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|----------------------|--|--|------------------------|--|--|--|--|--|--|
| | Key Personnel | | | Facilities Equipment | | External Body Registration E.g. CIDB, DOSH | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | | |
| | | | | | | Ministry of Tourism Malaysia "Lesen Perniagaan Pengendalian Pelancongan Dalam Negeri" | | | | | | | |

Logistics & Warehousing Marine Marine Operations Services Service/Repair of Fire Detection System 21121218S

Work Category's Description : The provision of Service/Repair of Fire Detection System

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | | E.g. ISO, API Standard | | | | | |
| | | | | | | Fire Watch Permit from Jabatan Bomba | | | | | | |

Logistics & Warehousing Marine Marine Services Lashing, Mooring/Unmooring & Liftings Work Category :

21121410S

Work Category's Description : The provision of manpower and equipment for Lashing, Mooring/Unmooring & Liftings

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|--|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | | |
| | | | | | | Registration With Lembaga Pelabuhan | | | | | | | |

Work Category : Logistics & Warehousing Marine Marine Services Precool, Repairing Internal Machinery

21121411S

Work Category's Description : The provision of manpower and equipment for Precool & Repairing Internal Machinery

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-------------------------|----------------------|---|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | Registration With Lembaga Pelabuhan | | | | | | |

Logistics & Warehousing Marine Marine Services Stuffing & Unstuffing of Containers 211214128

Work Category's Description : The provision of manpower and equipment for Stuffing & Unstuffing of Containers

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|--|---------------------------|----------------------|---|--|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | E.g. Warerlouse, Dockyaru | E.g. Tools | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | | | |
| | | | | | | Registration With Lembaga Pelabuhan | | | | | | | |

Logistics & Warehousing Marine Marine Services Washing, Repair and Supply Parts & Equipment 21121413S

Work Category's Description : The provision of manpower and equipment for Washing, Repair and Supply Parts & Equipment for marine

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|--|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | | |
| | | | | | | Registration With Lembaga Pelabuhan | | | | | | | |

Logistics & Warehousing Marine Marine Transportation Passenger Ferry Work Category :

21121516S

Work Category's Description : The provision of passenger ferry including personnel to provide personnel transportation from base to/from onshore operation. Normally use in riverine activities

Mode of Operation : Vessel owner-operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|------------------------|--------------------------|----------------------|---|-----------------------------------|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment C | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | | |
| | | | | | | River Board Authority | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Work Category : Logistics & Warehousing
Marine
Marine Transportation
21121516S Passenger Ferry

The provision of passenger ferry including personnel to provide personnel transportation from base to/from onshore operation. Normally use in riverine activities

Mode of Operation : Vessel operator

Work Category's Description :

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|-----------------------------------|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | • . | E.g. ISO, API Standard | | | | | | |
| | | | | | | River Board Authority | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Logistics & Warehousing Marine Ship Ro-Ro/Car Carrier Work Category :

21121717S

Work Category's Description : The provision of Roll-on/roll-off ships or Car Carrier including personnel to transport vehicle such as but not limited to cars and trucks

Mode of Operation : Vessel owner-operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | | | |
| | | | | | | Certificate - Registry of vessel Master of Foreign Going/Master Mariner Class | | | | | | | |

Logistics & Warehousing Marine Ship Ro-Ro/Car Carrier Work Category :

21121717S

Work Category's Description : The provision of Roll-on/roll-off ships or Car Carrier including personnel to transport vehicle such as but not limited to cars and trucks

Mode of Operation : Vessel operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | | | |
| | | | | | | Certificate - Registry of vessel Master of Foreign Going/Master Mariner Class | | | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Clearance of Vessel-Crew Changes for Clearance of Vessel 21121910S

Work Category's Description : The provision of personnel for shipping agency services for Clearance of Vessel - Crew Changes for Clearance of Vessel

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | | E.g. ISO, API Standard | | | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Clearance of Vessel-Immigration Clearance 21121911S

Work Category's Description : The provision of personnel for shipping agency services for Clearance of Vessel - Immigration Clearance

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | | E.g. ISO, API Standard | | | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Customs Clearance-Issuance of Port Clearance 211219128

Work Category's Description : The provision of personnel for shipping agency services for Customs Clearance - Issuance of Port Clearance

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | | E.g. ISO, API Standard | | | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Customs Clearance-Sealing of Vessel Bonded Stores 21121913S

Work Category's Description : The provision of personnel for shipping agency services for Customs Clearance - Sealing of Vessel Bonded Stores

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | | E.g. ISO, API Standard | | | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Harbour Master Clearance-Crew Changes for Harbour Master Clearance 211219148

Work Category's Description : The provision of personnel for shipping agency services for Harbour Master Clearance - Crew Changes for Harbour Master Clearance

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | | E.g. ISO, API Standard | | | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Master Cash Advance Work Category :

21121915S

Work Category's Description : The provision of personnel for shipping agency services for Master Cash Advance

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|---|------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | | E.g. ISO, API Standard | | | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Port Health Clearance - Deratting Certification 21121917S

Work Category's Description : The provision of personnel for shipping agency services for Port Health Clearance - Deratting Certification

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Port Health Clearance - Vessel Status 21121918S

Work Category's Description : The provision of personnel for shipping agency services for Port Health Clearance - Vessel Status

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|---|-----------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Terminal - Port Costs Work Category :

211219198

Work Category's Description : The provision of personnel for shipping agency services for Terminal - Port Costs

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Terminal - Request Berthing Prospects 211219208

Work Category's Description : The provision of personnel for shipping agency services for Terminal - Request Berthing Prospects

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | |

Work Category : Logistics & Warehousing Marine Shipping Agency Services Terminal - Vessel Performance

21121921S

Work Category's Description : The provision of personnel for shipping agency services for Terminal - Vessel Performance

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Victualling - Bonded Stores Supply to Vessel 21121922S

Work Category's Description : The provision of personnel for shipping agency services for Victualling - Bonded Stores Supply to Vessel

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | |

Logistics & Warehousing Marine Shipping Agency Services Victualling - Provision Supply to Vessel 21121923S

Work Category's Description : The provision of personnel for shipping agency services for Victualling - Provision Supply to Vessel

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Approval from Jabatan Kastam Eksais Diraja Malaysia | | | | | |

Work Category : Logistics & Warehousing
Storage & Packing
21131700P Paper Bags

Work Category's Description : To design, supply and deliver paper bags

Mode of Operation : Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|----------------------|---|--|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | Business License from Local Authority | | | | | | |

Work Category : Logistics & Warehousing
Storage & Packing
21131800P Woven Bags

Work Category's Description : To design, supply and deliver woven bags

Mode of Operation : Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|----------------------|---|-----------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities Equipment | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | |
| | | | | | | Business License from Local | | | | | |
| | | | | | | Authority | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Logistics & Warehousing Marine Marine/Ship Repairs & Maintenance General Shiprepairs - Mechanical 21121627S

Work Category's Description : The provision of personnel and equipment to carry out general ship repairs

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|----------------------|---|-----------------------------------|--|--|--|
| | Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | Workshop | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Work Category | : | | Marketing, Advertising & Public Relation |
|---------------|---|-----------|---|
| | | | Audio/Visual |
| | | 22111000S | Audio/Visual Aid Program Production & Equipment |
| | | | |

Work Category's Description : The provision of audio/visual aid program production and related services such as but not limited to video montage, filming and rental of audio/visual equipment

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---------------|-------------------------------|-----------------|----------------------|-------------------------------|--|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | | CIDB - E01 - for large audio video set up 2. If Video Prod/Documentary Film, must have FINAS & KDN licence in installation of equipments as permanent structure | |

| Work Category | : | | Material Corrosion Equipment & Services and Inspection Services |
|---------------|---|-----------|--|
| | | | Coating Services |
| | | 23101000S | Corrosion Prevention of bolt, nut & flanges using composite compound |
| | | | |

Work Category's Description : The provision of labour, materials, consumables, equipments and facilities necessary for corrosion prevention of bolt, nut and flanges using composite compound

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|--|---------------------|---|----------------------|-------------------------------|-----------------------------------|--|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | |
| | relevant field Or | 3 years experience in corrosion prevention 5 years experience in corrosion prevention | Proper office setup | Personal hand tool Applicable equipment | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Coating Services Hydroblasting Work Category :

23101100S

Work Category's Description The provision of labour, materials, consumables, equipments and facilities necessary for hydroblasting for piping, structure and plant equipment

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--------------------|-------------------|--|-------------------------|---|-------------------------------|-----------------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.5 | | E.g. CIDB, DOSH | 2.g. 100, 74 1 0tandard |
| | relevant field Or | 3 years experience in hydroblasting 5 years experience in hydroblasting | 2.Operational workshop | Hydroblasting equipment *Company to provide the list of equipment, quantity, owned/ rent, owner (if rented). | | equivalent (e.g. NACE, TWI, | Surface preparation procedure Hydroblasting safety procedure |
| Quality Controller | | 3 years experience in quality assurance and quality control in hydroblasting | | | | | |

Material Corrosion Equipment & Services and Inspection Services Coating Services
Special Coating/Wrapping Work Category

23101200S

The provision of labour, materials, consumables, equipments and facilities necessary for special coating (ceramic, rubber lining, glass flake, fibre glass, chrome coating, fire proofing, etc) for piping, structure and plant equipment Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--------------------|-------------------|--|-------------------------|---|-------------------------------|---|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. 130, AFI Standard |
| | relevant field Or | 3 years experience in special coating/wrapping 5 years experience in special coating/wrapping | 2.Operational workshop | Air compressor, power tools, coating equipment, surface tester *Company to provide the list of equipment, quantity, owned/rent, owner (if rented). | | IMM (Institute of Material Malaysia) certification or equivalent (e.g. NACE, TWI, etc) for blaster | Surface preparation and coating/wrapping procedure |
| Quality Controller | | 3 years experience in quality assurance and quality control in special coating/wrapping | | | | | |

Material Corrosion Equipment & Services and Inspection Services Coating Services Surface Preparation, Painting & Coating Work Category

23101300S

The provision of labour, materials, consumables, equipments and facilities necessary for gritblasting surface preparation, painting and coating for piping, structure and plant equipment Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | | |
|--------------------|--|--|--|--|-------------------------------|--|---|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFT Standard | | | | | | |
| Supervisor | Diploma in Engineering or relevant field Or Certificate in related field | years experience surface preparation, painting and coating years experience in surface preparation, painting and coating | Proper office setup Operational workshop | Air compressor, blasting and painting equipment, surface tester, humidity tester, DFT tester, holiday tester, Chloride Tester "Company to provide the list of equipment, quantity, owned/ rent, owner (if rented). | | IMM (Institute of Material Malaysia) certification or equivalent (e.g. NACE, TWI, etc) for blaster and painter | Surface preparation and painting procedure Slelsating and painting safety procedure | | | | | | |
| Quality Controller | Certificate in related field | 3 years experience in quality assurance and quality control in blasting and coating | | | | | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Corrosion Control & Monitoring Services Cathodic Protection (CP) Work Category

23111000S

The provision of manpower, equipment, consumables and safety gears for Cathodic Protection services such as but not limited to CP Design & Installation Services, CP Maintenance Services and CP Survey such as but not limited to Specialized CP Survey (e.g. Direct Current Voltage Gradient (DCVG), Close Interval Potential Survey (CIPS), etc.) and CP Potential Survey (e.g. Insulating Flanges Testing (IF), Test Point, etc.) Work Category's Description

Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-----------------|--|--|---|---|----------------------|--|-----------------------------------|
| Designation | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Qualification Degree in Engineering or Science | | | CP related software e.g. design software, calibration and analytical tools and software | | | NACE standards |
| | Degree in Engineering or Science And Certification Corrosion related from National Association Corrosion Engineers (NACE) or other recognized body (e.g. The Welding Institute (TWI), Institute of Materials Malaysia (IMM), etc) | Minimum 5 years experience in Cathodic Protection design/Cathodic Protection Maintenance/Cathodic Protection specialized Survey/Cathodic Protection potential survey | | | | | |

Material Corrosion Equipment & Services and Inspection Services Corrosion Control & Monitoring Services Corrosion Monitoring Services Work Category :

23111100S

The provision of manpower, equipment, consumables and safety gears for corrosion monitoring services (including corrosion coupon, electrical resistance probe and linear polarization resistance probe) Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---|---|--|--|-------------------------------|-----------------------------------|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard |
| | Degree in any engineering or science And NACE Basic Corrosion Certification | | Manned and permanent office setup Workshop | Coupon retrieval tools and accessories | | | |
| | Degree in any engineering or science | 3 years experience in corrosion monitoring | | | | | |

Material Corrosion Equipment & Services and Inspection Services Corrosion Protection Services Pressure Containment Work Category :

23121100S

The provision of labour, materials, consumables, equipments and facilities necessary for repair services for pressure containment such as but not limited to Composite pipe repair, diamond wrap, clock spring and armour plate Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--|-------------------------|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 100is | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | Manned and permanent office setup Workshop | Wrapping tools and kits | | | | | | | |

Work Category : Material Corrosion Equipment & Services and Inspection Services

Corrosion Protection Services

23121200S Surface Preparation & Painting

Work Category's Description : The provision of manpower, services, equipment, materials and facilities for Onshore Fabrication - Surface Preparation and Painting

Mode of Operation : Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------------|--|--|---|--|----------------------|--|--|--|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Manager Quality Control/Supervisor | Diploma in Engineering or relevant field Or Diploma in related field Certificate in related field | 3 years experience surface preparation, painting and coating Or 7 years experience in surface preparation, painting and coating Or 3 years experience in quality assurance and quality control in blasting and coating 3 years experience in quality control in blasting and coating | | Air compressor, blasting and painting equipment, surface tester, humidity tester, DFT tester, humidity tester, DFT tester, holiday tester. "Company to provide the list of equipment, quantity, owned/ rent, owner (if rented). | | IMM (Institute of Material Malaysia) certification for blaster and painter | Surface preparation and painting procedure | | | | |

Work Category : Material Corrosion Equipment & Services and Inspection Services
23130000S Destructive Testing/Failure Analysis

Work Category's Description : The provision of manpower, equipment, consumables and safety gears for Failure Analysis including In-situ Metallography/ Replica, Scoop sampling, lab analysis, mechanical testing and corrosion testing

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---------------------------|--|--|---|-------------------------------|-----------------------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | | | E.g. CIDB, DOSH | g |
| Engineer | Science | failure investigation work | office setup 2.Operational laboratory for basic failure analysis. 3.Access to mechanical & | Laboratory equipment used to conduct sample analysis (e.g. Micro structure, mechanical and chemical) | | | Lab testing Accredited to Skim Akreditasi Makmal Malaysia (SAM) or equivalent |
| Technician | in Engineering or Science | Minimum 2 years experience in materials testing and failure investigation work | corrosion testing laboratory | | | | |

Material Corrosion Equipment & Services and Inspection Services Equipment Inspection Services Offshore Cranes Inspection Work Category :

23141300S

Work Category's Description The provision of manpower, equipment and safety gears for offshore crane inspection, load test and certification

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|----------------|-------------------------------|---|-----------------------------------|---|-----------------------------------|-----------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | | |
| Crane Surveyor | · | | Manned and permanent office setup | Inspection tools, load testing equipment, load cell and accessories | | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Acoustic Based Inspection Work Category :

23171000S

The provision of manpower, equipment, consumables, facilities and safety gears to conduct Acoustic Based Inspection such as but not limited to Acoustic Resonance, Acoustic Emission and Sand monitoring Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---|------------|------------------------------------|---|-------------------------------|-----------------------------------|-------------------------|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 74 1 0tandard |
| Engineer | Degree in Engineering or Science And ASNT Central Certification Program - Level 2 (Acoustic Emission) | inspection | Manned and permanent office setup. | Acoustic Emission equipment and accessories | | | |
| Operator | SPM or equivalent And ASNT Central Certification Program - Level 1 (Acoustic Emission) | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Acoustic Pulse Reflectometry (APR) Work Category :

23171100S

Work Category's Description The provision of manpower, equipment, consumables and safety gears for Acoustic Pulse Reflectometry (APR)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|------------------------|---|--|-------------------------|---|-------------------------------|--|-------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 74 Totalida d | | | | | |
| Mechanical Engineer | Degree in Mechanical Engineering | 3 years experience in heat exchanger / condenser / boiler cleaning & maintenance | | Acoustic Eye Dolphin G1 or G3 Inspection System and Software Pneumatic Tube/ Pipe Cleaner | | AELB (Atomic Energy Licensing Board) / LPTA | | | | | | |
| Supervisor/ Technician | Certificate/ Diploma in Mechanical or Electrical & Electronic Engineering | Attended formal training by the tools manufacturer and 2 years experience in inspection using Acoustic Eye Inspection System | | | | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Caisson Scanning Work Category

23171300S

Work Category's Description Provision of manpower, equipment, consumables, facilities and safety gears to conduct Caisson Scanning

Agent Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|----------------|-------------------------------|--|-------------------------|---|---|-----------------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | | | E.g. CIDB, DOSH | | | | | | |
| Field Engineer | | Minimum 3 years experience in Inspection services | | and accessories 2.Data logger software | Principal to have minimum 5 years proven track records in Caisson Inspection by carrying out Advanced NDT and camera inspection | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Caisson Scanning Work Category

23171300S

Work Category's Description Provision of manpower, equipment, consumables, facilities and safety gears to conduct Caisson Scanning

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-----------------|--|--|-----------------------------------|---|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. 130, Ari Standard | | | | |
| Project Manager | Degree in Engineering or Science | Minimum 5 years experience in managing projects, procurement and etc | Manned and permanent office setup | Caisson Inspection tools and accessories Data logger software | | | | | | | |
| Field Engineer | Degree or equivalent And ASNT / PCN / CSWIP Level II in Ultrasonic Testing | 3 years experience in Caisson Inspection Internally or Externally | | | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Column Scanning Work Category

23171400S

The provision of manpower, equipment, consumables, facilities and safety gears to conduct Column Scanning such as but not limited to Neutron Back Scattered scanning and Gamma Scanning Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|---|---|-------------------------|--|--|--|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Engineer | Degree in engineering or science | Minimum 3 years experience in Column Scanning Interpretation | | 1.Radiation source (gamma or neutron) 2.Data logger Software | | AELB (Atomic Energy Licensing Board) / LPTA | Radiation Safety Management System |
| Radiation Protection Officer | Valid license from LPTA | 3 years experience in Radiographic testing | | | | | |
| Radiographer | Jabatan Pembangunan Kemahiran (JPK) Level 2 Or International Certification (PCN, ASNT, CSWIP) | Minimum 3 years experience in Radiography Testing 2.Trained and certified to operate the specific equipment | | | | | |
| Assistant Radiographer | Jabatan Pembangunan Kemahiran (JPK) Level 1 Or International Certification (PCN, ASNT, CSWIP) | Minimum 1 years experience in Radiography Testing Trained and certified to operate the specific equipment | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Phonon Diagnostic Technology Work Category :

23171900S

Work Category's Description The provision of manpower, equipment, consumables, facilities and safety gears to conduct Phonon diagnostic

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|----------------|-------------------------------|-------------------------------|-----------------------------------|---|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| Field Engineer | | | Manned and permanent office setup | Phonon diagnostic tools and accessories Phonon Software | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Phonon Diagnostic Technology Work Category :

23171900S

Work Category's Description : Provision of manpower, equipment, consumables, facilities and safety gears to conduct Phonon diagnostic

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|----------------|-------------------------------------|-------------------------|--------------------------------------|---|-----------------------------------|-----------------|---------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | Ligi. 100, 7.1 Totalidard | | | | |
| Field Engineer | Degree in Engineering or Science | | Manned and permanent office setup | Phonon diagnostic tools and accessories Phonon Software | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Radiation Testing Work Category :

23172100S

The provision of manpower, equipment, consumables, facilities and safety gears to conduct. Advanced Radiation Testing such as but not limited to Computerized Radiographic testing, SafeRad and Neutron Radiographic Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|--|---|-------------------------|--|--|--|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| | Valid license from LPTA | 3 years experience in Radiographic testing | 1.Manned and permanent | Radiation source (Ir-192, Co- 60, X-ray) and accessories, software for CRT | | AELB (Atomic Energy Licensing Board) / LPTA | Radiation Safety Management System |
| Radiographer | | Minimum 3 years experience in Radiograhpy Testing Trained and certified to operate the specific equipment | facility | | | | |
| Assistant Radiographer | | Minimum 1 years experience in Radiograhpy Testing Trained and certified to operate the specific equipment | | | | | |
| Intepreter | JPK Radiograhpy Intepretation Level 2 | Minimum 3 years experience in Radiograhpy Intepretation | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Radiotracer Work Category :

23172200S

Work Category's Description The provision of manpower, equipment, consumables, facilities and safety gears for radiotracer services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------------|-------------------------------|---|----------------------|---|-----------------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, C | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Radiation Protection Officer | | 3 years experience in Radiographic testing | | Radiation source (Ir-192, Co- 60, X-ray) and accessories | | AELB (Atomic Energy Licensing Board) / LPTA | Radiation Safety Management System | | | | |
| Operator | | 2 years experience in Radiographic testing | | | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Tank Scanning Work Category

23172300S

Work Category's Description

The provision of manpower, equipment and safety gears for Tank Scanning such as but not limited to Tank Floor Scanning (Magnetic Flux Leakage(MFL)) and Crawler UT

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-----------------|---------------|--|--------------------------------------|--|-------------------------------|-----------------------------------|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | E.g. 100, Al Totalidard |
| Project Manager | | Minimum 5 years experience in managing inspection works | Manned and permanent office setup | MFL machine, UT crawler and accessories | | | |
| | | Minimum 3 years experience in Tank Inspection | | | | | |
| Operator | | Minimum 3 years experience in the specific tank NDT Inspection | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Thermography Work Category :

23172400S

Work Category's Description The provision of manpower, equipment, consumables and safety gears for Short and Long Wave thermography

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-----------------------------------|--|---|---|---|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Thermographer / Infrared Operator | SPM or equivalent And ITC (Infrared Training Center) Certified Thermographer level 2 Or ASNT Level 2 Or ACCP (ASNT Centre Certification Prgram Level 2) or PCN (Personnel Certification for Non-Destructive Testing) / CSWIP (Certification Scheme for Welding Inspection Personnel Level 2) | Minimum 3 years experience in thermography | Manned and permanent office setup | Owned or Rented 1. High Resolution Long wave Thermal Imager with built-in recorder and accessories 2. High Resolution 3.5µm short wave Gas FindIR with built-in recorder. "Company to provide the list of equipment, quantity, owned/ rent, owner (if rented). | | | |
| | SPM or equivalent And ITC (Infrared Training Center) Certified Thermographer level 2 | Minimum 3 years experience in thermography | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Tube Inspection Work Category

23172500S

The provision of manpower, equipment, consumables, facilities and safety gears to conduct Tube Testing such as but not limited to ECT, RFET, acoustic eyes, IRIS and MFL Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------|---|------------|---|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Examiner Level 1 | SPM or equivalent And ASNT Level 1 Or ACCP (ASNT Centre Certification Program Level 1) Or PCN (Personnel Certification for Non-Destructive Testing) / CSWIP (Certification Scheme for Welding 1) Inspection Personnel Level 1) IPK (Jabatian Pembangunan Kemahiran) Level 1 | | Manned and permanent Office Setup | RFET, IRIS, acoustic eyes and MFL machine, Multiple Frequency Eddy Current, strip chart recorder, encoder, calibration tube, gun & pulley, and accessories | | | |
| Examiner Level 2 | SPM or equivalent And ASNT Level 2 Or ACCP (ASNT Centre Certification Program Level 2) Or PCN (Personnel Certification for Non-Destructive Testing) CSWIP (Certification Scheme for Welding Inspection Personnel Level 2) Or JPK (Jabatan Pembangunan Kemahiran) Level 2 | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Ultrasonic Testing Work Category

23172600S

Work Category's Description

The provision of manpower, equipment, consumables, facilities and safety gears to conduct Advanced Ultrasonic Testing such as but not limited to PAUT, LRUT, Guided Wave and TOFD

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------|--|---|---|---------------------------------|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Examiner Level 1 | SPM or equivalent And And ASNT Level 1 Or ACCP (ASNT Centre Certification Program Level 1) Or PCN (Personnel Certification for Non-Destructive Testing) (-CSWIP (Certification Scheme for Welding Inspection Personnel Level 1) Or JPK (Jabatan Pembangunan Kemahiran) Level 1 | | Manned and permanent office setup | Basic Calibration Blocks / Pipe | | | |
| Examiner Level 2 | SPM or equivalent And ASNT Level 2 Or ACCP (ASNT Centre Certification Program Level 2) Or PCN (Personnel Certification for Non-Destructive Testing) / CSWIP (Certification Scheme for Welding Inspection Personnel Level 2) Or JPK (Jabatan Pembangunan Kemahiran) Level 2 | Minimum 3 years experience in UT related | | | | | |

Material Corrosion Equipment & Services and Inspection Services Non Destructive Test (NDT) Services Visual Aid Inspection Work Category :

23172700S

The provision of manpower, equipment and safety gears for visual aid inspection such as but not limited to Boroscope, Videoscope, fibrescope, CCTV and Unmanned Autonomous Vehicle (UAV) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|---|----------------------|--|-----------------------------------|-----------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment Cor | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai Totalidard | | | | |
| Operator | · | Minimum 1 year experience in Boroscope, Videoscope, fibrescope or specific visual aid inspection tools | office setup | Boroscope / videoscope / fibrescope etc. (digitally recorded, data transferable to computer) equipment and accessories | | | | | | | |

Material Corrosion Equipment & Services and Inspection Services Risk Based Inspection Work Category 23180000S

Work Category's Description The provision of manpower and software to conduct Risk Based Inspection study

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------|---|--|--------------------------------------|---------------------------------|-------------------------------|-----------------------------------|--------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | 2.9. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 74 1 0 tandara | | | | |
| RBI Engineer | Degree in Engineering of related field | 3 years experience in Risk Based Inspection | Manned and permanent office setup | RBI software (Owned or rent) | | | | | | | |
| Corrosion Engineer | Degree in Engineering of related field | 3 years experience in material & corrosion | 1 | | | | | | | | |
| Technical Assistant | SPM or equivalent OR Diploma or higher in Engineering or related field | year experience in engineering/ inspection data management (if with SPM) OR Not required (if with diploma in engineering) | | | | | | | | | |

Work Category : Mechanical Equipment & Services
Condition Based Monitoring (CBM)
24111000S CPBM Data Collection, Monitoring & Analysis (Mechanical)

Work Category's Description : Provision of condition monitoring data collection such as vibration/acoustic, lube oil analysis, thermography, process parameter and performance, etc. for rotating equipment

Mode of Operation : Agent

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|--|--------------------------|---------------------------------------|----------------------|-------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | · · | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Engineer | Degree in Mechanical Engineering or related Engineering field | 3 years experience in CPBM data collection, monitoring & analysis. Trained and certified from Principal | | Analyzing tools and licensed software | | | |
| Specialist | Degree in Mechanical Engineering or any related Engineering field and related professional certification (e.g. ASNT Level II, ICML, etc.) | | | | | | |
| | Engineering field Or Certificate in related field | 3 years experience in CPBM data collection, monitoring & analysis Or 5 years experience in CPBM data collection, monitoring & | | | | | |
| | | analysis | | | | | |

| Work Category | : | Mechanical Equipment & Services Condition Based Monitoring (CBM) 4111000S CPBM Data Collection, Monitoring & Analysis (Mechanical) | |
|-----------------------------|---|---|---|
| Work Category's Description | ŧ | The provision of condition monitoring data collection such as but not limited to vibration/acoustic, lube oil analysis, thermography, process parameter and performance for rotating quipment | ı |
| Mode of Operation | : | Self Operated | |

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|---|--|---------------------------------------|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | | | | |
| Engineer | Engineering or related | 5 years experience in CPBM data collection, monitoring & analysis. | | Analyzing tools and licensed software | | | |
| Specialist | Degree in Mechanical Engineering or any related Engineering field and related professional certification (e.g. ASNT Level II, ICML, etc.) | | | | | | |
| Supervisor | Engineering or related Engineering field Or Certificate in related field | S years experience in CPBM data collection, monitoring & analysis Or 7 years experience in CPBM data collection, monitoring & analysis | | | | | |

Mechanical Equipment & Services Condition Based Monitoring (CBM) Motor Current Signature Analysis (MCSA) Work Category : 24111100S

Work Category's Description : The provision of performing recording, measurement and analysis of Motor Current Signature Analysis (MCSA)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------------|--------------------------|-------------------------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | 3 years experience in MCSA analysis | | MCSA Measurement Equipment | | | | | | | |
| | | 5 years experience in MCSA analysis | | | | | | | | | |

Mechanical Equipment & Services Condition Based Monitoring (CBM) Partial Discharge Analysis Work Category :

24111200S

Work Category's Description : The provision of performing recording, measurement and analysis of Partial Discharge

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|--|----------------------|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | office setup | Partial discharge measurement and recording device | | | | | | | |
| | | 5 years experience in partial discharge analysis | | device | | | | | | | |

Mechanical Equipment & Services Condition Based Monitoring (CBM) TAN Delta Analysis Work Category :

24111300S

Work Category's Description : The provision of performing recording, measurement and analysis of TAN Delta

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|---|--------------------------------------|------------------------------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Expenence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | Manned and permanent office setup | TAN Delta Measurement Equipment | | | | | | | |
| | | 5 years experience in TAN Delta analysis | | | | | | | | | |

Mechanical Equipment & Services Condition Based Monitoring (CBM) Thermography Analysis Work Category :

24111400S

Work Category's Description : The provision of performing recording, measurement and analysis of Thermography

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------------------|-----------------------------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | Manned and permanent office setup | Infrared thermal imager/camera | | | | | | | |

Mechanical Equipment & Services Condition Based Monitoring (CBM) Transformer Oil Analysis Work Category :

24111500S

Work Category's Description : The provision of sampling, testing, data collection and analysis of Transformer oil

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-----------------|---|---------------------------------------|--|---|----------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | E.g. Tools | company o Experience | E.g. CIDB, DOSH | |
| Chemist | | 3 years experience in oil analysis | Operational Laboratory | Gas Chromatography Breakdown voltage tester | | | |
| Site Technician | Certificate in any Engineering field | 3 years experience in oil sampling | | 3. Voltage Calibrator 4. Insulating Oil Tester 5. Fourier Transform Infrared (FT-IR) 6. High Performance Liquid Chromatography(HPLC) 7. Automatic Coulometric Karl Fischer Titrator 8. Automated Insulation Power Factor Test Set | | | |

Mechanical Equipment & Services Heat Process Equipment Air Cooled Heat Exchanger Work Category

24151000P

Work Category's Description To design, fabricate, assemble, inspect, test, supply and deliver to site and provide commissioning support on air cooled heat exchanger

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------------|--------------------------------------|---|--------------------------|--|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Production Manager | Degree in Mechanical Engineering | Minimum 5 years experience in pressure vessel fabrication | | Lifting facilitates (i.e.Overhead Crane, forklift) CAD, Thermal & Vibration | | Business License from local authority DOSH – "Surat sebagai | |
| | Or | Or | facilities | design software 3. Rolling, cutting & bending | | syarikat pembuat pengandung /bejana | |
| | Diploma in Mechanical Engineering | Minimum 7 years experience in pressure vessel fabrication | | machine 4. Welding facilities 5. Access to blasting & painting facilities / services 6. Testing facilities (e.g. | | tekanan tak berapi | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in pressure vessel design | | pressure test, hydrotest and etc.) 7. Access to NDT and heat treatment facilities/services | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in pressure vessel design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Boilers Work Category :

24151200P

Work Category's Description To design, supply, fabricate, inspect, test, deliver and provide commissioning support on boilers

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Expendice | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in boiler | | | | | | |
| | | | | | | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24151200P Boilers

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on boilers

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---|--|--|---|----------------------|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | | Lifting Facilities (i.e. Overhead Crane, forkift) CAD & Thermal design software Rolling, cutting & bending machine Welding facilities Access to blasting & paiting facilities / services Testing facilities (e.g. | | Susiness License from local authority DOSH—"Surat sebagai syarikat pembuat dandang stim | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in boiler fabrication Or Minimum 7 years experience in boiler fabrication | | pressure test, hydrotest and etc.) 7. Access to NDT services and heat treatment facilities/services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in boiler design | | | | | |
| Design Engineer | Degree in Mechanical /Chemical Engineering | Minimum 3 years experience in boiler design |] | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Burners Work Category :

24151300P

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on Burners.

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in burner | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24151300P Burners

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on Burners.

Mode of Operation : Manufacturer

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|---|---|--|--|--|----------------------|--|-----------------------------------|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard Access to burner testing facilities | Lifting Facilitites (i.e. Overhead Crane, forklift) C. ADI, Computerize Fluid Dynamics & Thermal design software 3. Welding facilities 4. Access to blasting & pating facilities /services 5. Access to NDT services | | Business License from local authority | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in burner fabrication Or Minimum 7 years experience in burner fabrication | | | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in burner design and fabrication | | | | | |
| Design Engineer | Degree in Mechanical / Chemical Engineering | Minimum 3 years experience in burner design |] | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Cooling Tower Work Category :

24151400P

Work Category's Description To design, fabricate, assemble, inspect, test, supply and deliver to site and provide commissioning support on Cooling Tower

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|--|--|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | , and the second | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in cooling tower | | | | | | |

Mechanical Equipment & Services Heat Process Equipment Double Pipe/Fintube Work Category :

24151500P

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site double pipe/fintube

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in double pipe/fintube | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24151500P Double Pipe/Fintube

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site double pipe/fintube

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|------------------------------------|---|--|---|--|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation Project Manager | Qualification Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Experience Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Fabrication Yard/ Fabrication & Assembling facilities | Lifting Facilitites (i.e. Overhead Crane, forklift) C. CAD & Thermal design software Rolling, cutting & bending machine Welding facilities S. Access to blasting & pairing facilities / services | | Susiness License from local authority DOSH - "Surat sebagai syarikat pembuat pengandung /bejana tekanan tak berapi" | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in double pipe/fintube fabrication Or Minimum 7 years experience in double pipe/fintube fabrication | | 6. Testing facilities (e.g. pressure test, hydrotest and etc.) 7. Access to NDT services and heat treatment facilities/services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in double pipe/fintube design | | | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in double pipe/fintube design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Fired Heaters Work Category :

24151600P

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on fired heater

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--------------------------|-----------|--|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | O | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in fired heaters | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24151600P Fired Heaters

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on fired heater

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|--|--|--|---|----------------------|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Engineering OrDiploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Fabrication Yard | Lifting Facilitites (i.e.Overhead Crane, forklift) CAD & Thermal design software Rolling, cutting & bending machine | | Business License from local authority | |
| Production Manager | Or Diploma in Mechanical | Minimum 5 years experience in fired heater fabrication Or Minimum 7 years experience in fired heater fabrication | | Welding facilities Access to blasting & pairing facilities /services Testing facilities (e.g. pressure test, hydrotest and etc.) Access to NDT services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in fired heater design and fabrication | | | | | |
| Design Engineer | Degree in Mechanical / Chemical Engineering | Minimum 3 years experience in fired heater thermal & mechanical design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Furnaces Work Category :

24151700P

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on Furnaces

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--|------------|--|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | O | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Facilities E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in incinerator | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24151700P Furnaces

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on Furnaces

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---|--|--|---|----------------------|---------------------------------------|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. warehouse, Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard | Litting Facilities Cane, forklift) CAD & Thermal design software Rolling, cutting & bending machine Welding facilities Access to blasting & parting facilities /services Testing facilities (e.g. | | Business License from local authority | |
| Production Manager | Degree in Mechanical Engineering | Minimum 5 years experience in fired heater fabrication | | pressure test, hydrotest and etc.) 7. Access to NDT services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in fired heater design and fabrication | | | | | |
| Design Engineer | Degree in Mechanical / Chemical Engineering | Minimum 3 years experience in fired heater thermal & mechanical design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Hampson coil/Braized Aluminium Plate Fin : Work Category

24151800P

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site Hampson Coil/Braized Aluminium Plate

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | Principal to have minimum 10 years experience in Hampson coil / braized aluminium plate | | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24151800P Hampson coil/Braized Aluminium Plate Fin

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site Hampson Coil/Braized Aluminium Plate

Mode of Operation : Fabricator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------------|---|---|---|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard/ Fabrication & Assembling facilities | Lifting Facilitites (i.e. Overhead Crane, forklift) CAD & Thermal design software Rolling, cutting & bending machine Welding facilities Access to blasting & pating facilities / services Testing facilities (e.g. | | Business License from local authority 2.DOSH – "Surat sebagai syarikat pembuat pengandung /bejana tekanan tak berapi" | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in Hampson col / braized aluminium fabrication Or Minimum 7 years experience in Hampson coil / braized aluminium fabrication | | pressure test, hydrotest and etc.) 7. Access to NDT services and heat treatment facilities/services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in Hampson coil / braized aluminium plate design | | | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in Hampson coil / braized aluminium design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Incinerators Work Category :

24151900P

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on Incinerators

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--|------------|--|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Facilities E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in incinerator | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24151900P Incinerators

Work Category's Description : To design, supply, fabricate, inspect, test, deliver and provide commissioning support on Incinerators

Mode of Operation : Fabricator

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---|--|--|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard | Lifting Facilitites (i.e. Overhead Crane, forklift) 2. CAD & Thermal design software 3. Rolling, cutting & bending machine 4. Welding facilities 5. Access to blasting & painting facilities /services 6. Testing facilities (e.g. | | Business License from local authority | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in fired heater fabrication Or Minimum 7 years experience in fired heater fabrication | | pressure test, hydrotest and etc.) 7. Access to NDT services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in fired heater design and fabrication | | | | | |
| Design Engineer | Degree in Mechanical / Chemical Engineering | Minimum 3 years experience in fired heater thermal & mechanical design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Heat Process Equipment Plate Heat Exchanger Work Category :

24152000P

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site and provide commissioning support on Plate Heat Exchanger

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|--|---------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in plate & frame type heat exchanger | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24152000P Plate Heat Exchanger

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site and provide commissioning support on Plate Heat Exchanger

Mode of Operation : Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------|---|---|---|---|----------------------|---|-----------------------------------|--|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard/ Fabrication & Assembling facilities | Lifting Facilitites (i.e. Overhead Crane, forklift) CAD & Thermal design software Rolling, cutting & bending machine Welding facilities Access to blasting & paiting facilities / services Testing facilities (e.g. | | Business License from local authority 2.DOSH – "Surat sebagai syarikat pembuat pengandung /bejana tekanan tak berapi" | | | | | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in pressure vessel fabrication Or Minimum 7 years experience in pressure vessel fabrication | | pressure test, hydrotest and etc.) 7. Access to NDT services and heat treatment facilities/services | | | | | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in pressure vessel design | | | | | | | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in pressure vessel design | 1 | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24152300P Shell & Tube Heat Exchanger

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site shell & tube heat exchanger.

Mode of Operation : Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--------------------------------------|---|---|---|--|----------------------|--|-----------------------------------|--|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience | Fabrication Yard/ Fabrication & Assembling facilities | Lifting facilitates (i.e. Overhead Crane, forklift) C. AD. Pressure Vessel Design software, Thermal & Vibration design software 3. Rolling, cutting & bending machine 4. Welding facilities 5. Access to blasting & painting facilities / services | | Business License from local authority 2.DOSH - "Surat sebagai syarikat pembuat pengandung /bejana tekanan tak berapi | | | | | |
| Engineering Manager Design Engineer | | Minimum 5 years experience in heat exchanger design Minimum 3 years experience in pressure vessel design | | Testing facilities (e.g. pressure test, hydrotest and etc.) Access to NDT and heat treatment facilities /services | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | | | | | |

Mechanical Equipment & Services Heat Process Equipment Transfer Line Exchanger Work Category :

24152400P

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site and provide commissioning support on transfer line exchanger

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|------------|--|-----------|--|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Facilities E.g. Warehouse, Dockyard | | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in transfer line exchanger | | | | | | |

Work Category : Mechanical Equipment & Services
Heat Process Equipment
24152400P Transfer Line Exchanger

Work Category's Description : To design, fabricate, assemble, inspect, test, supply and deliver to site and provide commissioning support on transfer line exchanger

Mode of Operation : Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------|---|---|---|---|----------------------|---|-----------------------------------|--|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard/ Fabrication & Assembling facilities | Litting Facilitites (i.e. Overhead Crane, forklift) CAD & Thermal design software Rolling, cutting & bending machine Welding facilities Access to blasting & pating facilities / services 6. Testing facilities / services Testing facilities (e.g. | | Business License from local authority 2.DOSH - "Surat sebagai syarikat pembuat pengandung /bejana tekanan tak berapi" | | | | | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in pressure vessel fabrication Or Minimum 7 years experience in pressure vessel fabrication | | pressure test, hydrotest and etc.) 7. Access to NDT services and heat treatment facilities/services | | | | | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in pressure vessel design | | | | | | | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in pressure vessel design | | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | | | | | |

Work Category : Mechanical Equipment & Services
Hoisting & Lifting Services
24181200S Heavy Lift Services

Work Category's Description : The provision of services/rental/supply of heavy lift equipment

Mode of Operation : Self-Operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|------------------------|---|---|--------------------------|---|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 1001s | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Lifting Engineer | Degree in Mechanical / Civil Engineering | 5 years experience in heavy lifting work | | Crane 300 tones DOSH - Valid certificate of fitness (Perakuan Kelayakan Mesin Angkat - PMA) | | | | | | | | |
| Crane driver /operator | DOSH registration for crane operator | 5 years experience in crane operation | | iviesin Angkat - PiviA) | | | | | | | | |

Mechanical Equipment & Services
On-Line Under Pressure Maintenance
Hot Tapping & Line Stoppling Work Category :

24201000S

Work Category's Description The provision of manpower, materials, consumables, equipment and facilities necessary for hot tapping & line stoppling

Self-Operated Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|-------------------------------------|---|---|---|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Facilities E.g. Warehouse, Dockyard | E.g. Tools | Company's Expendice | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | Degree in Mechanical Engineering | 5 years experience in Hot Tapping & Line Stoppling | Proper office in Malaysia Operational workshop in Malaysia Access fabrication | Hot tapping tools (e.g. drill machine, line stopple) | | | | | | | | |
| Technician | Certificate in engineering | 5 years experience in Hot Tapping & Line Stoppling | workshop for clamp fabrication in Malaysia On- Line Under Pressure Maintenance Hot Tapping & Line Stoppling | 2. Hand tools | | | | | | | | |

Mechanical Equipment & Services On-line Under Pressure Maintenance Line Freezing Work Category : 24201100S

Work Category's Description The provision of manpower, services, equipment, materials, facilities and design engineering for Line Freezing

Mode of Operation Self-operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|---|---|--|--|----------------------|--|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Expendice | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | certificate in any Engineering discipline | | Manned and permanent office setup Operational workshop | Line freezing equipment and accessories | | Business License from local authority | | | | | |
| | | Minimum 3 years experience in line freezing | | | | | | | | | |

Mechanical Equipment & Services On-Line Under Pressure Maintenance Online Leak Sealing Work Category :

24201200S

Work Category's Description The provision of manpower, services, equipment, materials, facilities and design engineering for online leak sealing

Mode of Operation Self-Operated

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|--|--|-------------------------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | 5 years experience in Online Leak Sealing | | Injection pump Hand tools | | | | | | | |
| Technician | | 5 years experience in Online Leak Sealing | Line Under Pressure Maintenance Hot Tapping & Line Stoppling | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Centrifugal Pump Fire Water Pump Work Category :

24211110P

To design, assemble, supply, deliver, install, hook up, test and commission Fire Water Pump Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|---|--|-----------------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | fieldOr Diploma in any Engineering field | Minimum 3 years experience in project managementOr Minimum 5 years experience in project management | Manned and permanent office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| _ | Engineering field | Minimum 5 years experience in Fire Water Pump Trained and certified from Principal | | | | | | | | | | |
| Technician | | Minimum 5 years experience in Fire Water Pump | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Centrifugal Pump Fire Water Pump Work Category

24211110P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Fire Water Pump

Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---------------------------------------|---|--------------------------|---|----------------------|-------------------------------|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Engineering field | Minimum 5 years experience | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| | engineering field | Minimum 5 years experience in Fire Water Pump Z.Trained and certified from Principal | | | | | |
| | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Fire Water Pump | | | | | |

Mechanical Equipment & Services Rotating Equipment Centrifugal Pump Horizontal API 610 Pump Work Category

24211111P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Horizontal API 610 Pump

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|---|-----------------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | Engineering field | Minimum 5 years experience in Horizontal API 610 Pump Z.Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Horizontal API 610 Pump | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Centrifugal Pump Horizontal API 610 Pump Work Category

24211111P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Horizontal API 610 Pump

Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------------|---|---|--|---|----------------------|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup Assembling facility Access to testing facility | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| Engineer | Degree in Mechanical Engineering or related engineering field | Minimum 5 years experience in Horizontal API 610 Pump Z.Trained and certified from Principal | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Horizontal API 610 Pump | | | | | |

Mechanical Equipment & Services Rotating Equipment Centrifugal Pump Vertical API 610 Pump Work Category :

24211114P

To design, assemble, supply, deliver, install, hook up, test and commission Vertical API 610 Pump Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|---|--------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | Engineering or related Engineering field | Minimum 5 years experience in Vertical API 610 Pump 2.Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Vertical API 610 Pump | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Centrifugal Pump Vertical API 610 Pump Work Category :

24211114P

To design, assemble, supply, deliver, install, hook up, test and commission Vertical API 610 Pump Work Category's Description

Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|--|---|--------------------------|---|----------------------|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | field Or Diploma in any Engineering field | Minimum 5 years experience | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| | engineering field | Minimum 5 years experience in Vertical API 610 Pump 2.Trained and certified from Principal | | | | | |
| | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | |
| Technician | | Minimum 5 years experience in Vertical API 610 Pump | | | | | |

Mechanical Equipment & Services Rotating Equipment Compressors Air Compressor Work Category :

24211210P

To design, assemble, supply, deliver, install, hook up, test and commission Air Compressor Work Category's Description :

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|---|--------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| ŭ. | Engineering field | Minimum 5 years experience in Air Compressor Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Air Compressor | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Compressors Air Compressor Work Category :

24211210P

To design, assemble, supply, deliver, install, hook up, test and commission Air Compressor Work Category's Description

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------------|-------------------------------|---|--------------------------|---|----------------------|-------------------------------|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Coordinator | Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| Engineer | Engineering field | Minimum 5 years experience in Air Compressor 2.Trained and certified from Principal | | | | | | | | | | |
| QA/QC Engineer | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | | | | | | |
| Technician | | Minimum 5 years experience in Air Compressor | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Compressors Centrifugal Compressor Work Category :

24211211P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Centrifugal Compressor

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|---|--------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| ŭ. | Engineering field | Minimum 5 years experience in Centrifugal Compressor Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Centrifugal Compressor | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Compressors Centrifugal Compressor Work Category :

24211211P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test, commission Centrifugal Compressor

Mode of Operation Assembler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------------|--|---|--|---|----------------------|-------------------------------|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Coordinator | field Or Diploma in any Engineering field | | Manned and permanent office setup Assembling facility Access to testing facility | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| Engineer | Engineering field | Minimum 5 years experience in Centrifugal Compressor Trained and certified from Principal | | | | | | | | | | |
| QA/QC Engineer | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | | | | | | |
| Technician | | Minimum 5 years experience in Centrifugal Compressor | | | | | | | | | | |

Work Category :

Mechanical Equipment & Services Rotating Equipment Compressors Reciprocating Compressor

24211212P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Reciprocating Compressor

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|--|---|-----------------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| | Engineering field | Minimum 5 years experience in Reciprocating Compressor Trained and certified from Principal | | | | | | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Reciprocating Compressor | | | | | | | | | | |

Work Category : Mechanical Equipment & Service

Mechanical Equipment & Services Rotating Equipment Compressors Reciprocating Compressor

24211212P Reciprocating Compresso

Work Category's Description : To design, assemble, supply, deliver, install, hook up, test and commission Reciprocating Compressor

Mode of Operation : Assembler

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------------|---|---|--|---|----------------------|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | 7. 7. 7. | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | | Manned and permanent office setup Assembling facility Access to testing facility | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| Engineer | Degree in Mechanical Engineering or related Engineering field | Minimum 5 years experience in Reciprocating Compressor Trained and certified from Principal | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Reciprocating Compressor | | | | | |

Work Category : Mechanical Equipment & Service

Mechanical Equipment & Services Rotating Equipment Compressors Rotary/Screw Compressor

24211213P Rotary/Screw Compresso

Work Category's Description : To design, assemble, supply, deliver, install, hook up, test and commission Rotary/Screw Compressor

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|---|--------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | Engineering field | Minimum 5 years experience in Rotary/Screw Compressor 2.Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Rotary/Screw Compressor | | | | | | | | | |

Work Category : Mechanical Equipment & Service
Rotation Equipment

Mechanical Equipment & Services Rotating Equipment Compressors Rotary/Screw Compressor

24211213P Rotary/Screw Compress

Work Category's Description : To design, assemble, supply, deliver, install, hook up, test and commission Rotary/Screw Compressor

Mode of Operation : Assembler

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---|---|--|---|----------------------|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, API Standard |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup Assembling facility Access to testing facility | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| Engineer | Degree in Mechanical Engineering or related Engineering field | Minimum 5 years experience in Rotary/Screw Compressor Trained and certified from Principal | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) 2.Trained and certified from Principal | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Rotary/Screw Compressor | | | | | |

Mechanical Equipment & Services Rotating Equipment Dry Gas Seal Work Category :

24211400P

Work Category's Description To supply and deliver dry gas seal

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|--|--------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Expenence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| · - | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | engineering field | Minimum 5 years experience in mechanical rotating related works Trained and certified from Principal | | | | | | | | | |
| Technician | Principal | Minimum 5 years experience in mechanical rotating related works | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Dry Gas Seal Work Category :

24211400P

Work Category's Description To supply and deliver dry gas seal

Mode of Operation Assembler

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------------|---|---|--------------------------|---|----------------------|--|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Coordinator | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| Engineer | Degree in Mechanical Engineering or related engineering field | Minimum 5 years experience in mechanical rotating related works Trained and certified from Principal | | | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in mechanical rotating related works | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Gas Turbine Work Category :

24211600P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Gas Turbine

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|--|--|--------------------------|----------------------|-------------------------------|-----------------|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| | Engineering field | Minimum 5 years experience in Gas Turbine 2.Trained and certified from Principal Minimum 5 years experience in Gas Turbine | | | | | |
| Technician | | Minimum 5 years experience in Gas Turbine | | | | | |

Mechanical Equipment & Services Rotating Equipment Gas Turbine Work Category :

24211600P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Gas Turbine

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------|-------------------------------|---|--------------------------|---|---|--|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project Coordinator | Engineering field | Minimum 5 years experience | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| Engineer | Engineering field | Minimum 5 years experience in Gas Turbine Trained and certified from Principal | | | | | | | | | |
| QA/QC Engineer | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Gas Turbine | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Mechanical Seal for Pump Work Category :

24211700P

Work Category's Description To supply and deliver mechanical seal for pump

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---|--|---|-----------------------------------|-------------------|----------------------|---------------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | | External Body | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | field or Diploma in any Engineering field | Minimum 3 years experience in project management or Minimum 5 years experience in project management | Manned and permanent office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| ngineer Degree in Mechanical Engineering or related engineering field Hinimum 5 years experience in mechanical rotating related works | | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Mechanical Seal for Pump Work Category :

24211700P

To supply and deliver mechanical seal for pump Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|---------------------------------------|---|---------------------------------------|---|----------------------|---------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| · · | | | office setup 2.Assembling facility | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | engineering field | Minimum 5 years experience in mechanical rotating related works Trained and certified from Principal | | | | | | | | | |
| | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in mechanical rotating related works | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Special Purpose Pumps Cryogenic Pump Work Category

24212113P Work Category's Description : To supply and deliver Cryogenic Pump

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------|---|--|-----------------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project Coordinator | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | engineering field | Minimum 5 years experience in Cryogenic Pump Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Cryogenic Pump | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Special Purpose Pumps Cryogenic Pump Work Category :

24212113P Work Category's Description : To supply and deliver Cryogenic Pump

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------------|-------------------------------|---|--------------------------|---|----------------------|-------------------------------|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Coordinator | Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| Engineer | engineering field | Minimum 5 years experience in Cryogenic Pump Trained and certified from Principal | | | | | | | | | | |
| QA/QC Engineer | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | | | | | | |
| Technician | | Minimum 5 years experience in Cryogenic Pump | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Special Purpose Pumps High Speed Work Category

24212117P

To design, assemble, supply, deliver, install, hook up, test and commission High Speed Pump Work Category's Description

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|--|---|--------------------------|----------------------|-------------------------------|-----------------|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| | engineering field | Minimum 5 years experience in High Speed Pump Trained and certified from Principal | | | | | |
| Technician | | Minimum 5 years experience in High Speed Pump | | | | | |

Mechanical Equipment & Services Rotating Equipment Special Purpose Pumps High Speed Work Category :

24212117P

To design, assemble, supply, deliver, install, hook up, test and commission High Speed Pump Work Category's Description

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|--|---|--------------------------|---|----------------------|-------------------------------|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Coordinator | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| | engineering field | Minimum 5 years experience in High Speed Pump Z.Trained and certified from Principal | | | | | |
| | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) Trained and certified from Principal | | | | | |
| Technician | | Minimum 5 years experience in High Speed Pump | | | | | |

Mechanical Equipment & Services Rotating Equipment Special Purpose Pumps Multiphase Work Category :

24212118P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Multiphase Pump

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|---|-----------------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | engineering field | Minimum 5 years experience in Multiphase Pump Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Multiphase Pump | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Special Purpose Pumps Multiphase Work Category : 24212118P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Multiphase Pump

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------|---|---|--|---|-------------------------------|--|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup Assembling facility Access to testing facility | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| Engineer | engineering field | Minimum 5 years experience in Multiphase Pump Trained and certified from Principal | | | | | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) 2.Trained and certified from Principal | | | | | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Multiphase Pump | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Steam Turbine Work Category :

24212200P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Steam Turbine

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|--|--|--------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Engineer | field Or Diploma in any Engineering field Degree in Mechanical | Minimum 5 years experience in project management 1.Minimum 5 years | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | |
| | Engineering field | experience in Steam Turbine 2.Trained and certified from Principal | | | | | | | | | |
| Technician | | Minimum 5 years experience in Steam Turbine | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Steam Turbine Work Category :

24212200P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Steam Turbine

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------------|-------------------------------|---|--------------------------|---|----------------------|-------------------------------|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Coordinator | Engineering field | Minimum 5 years experience | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| Engineer | Engineering field | Minimum 5 years experience in Steam Turbine 2.Trained and certified from Principal | | | | | | | | | | |
| QA/QC Engineer | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) 2.Trained and certified from Principal | | | | | | | | | | |
| Technician | | Minimum 5 years experience in Steam Turbine | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Turbo Expander Work Category :

24212300P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Turbo Expander

Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|--|---|--------------------------|-------------------|----------------------|-------------------------------|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| | Engineering field | Minimum 5 years experience in Turbo Expander Trained and certified from Principal | | | | | |
| Technician | | Minimum 5 years experience in Turbo Expander | | | | | |

Mechanical Equipment & Services Rotating Equipment Turbo Expander Work Category :

24212300P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test and commission Turbo Expander

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---------------------------------------|---|--------------------------|---|----------------------|-------------------------------|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Coordinator | Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.DOSH – "Surat Kebenaran | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| Engineer | Engineering field | Minimum 5 years experience in Turbo Expander Trained and certified from Principal | | | | | |
| QA/QC Engineer | | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) 2.Trained and certified from Principal | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in Turbo Expander | | | | | |

Mechanical Equipment & Services Rotating Equipment Wet Seal for Compressor/Expander Work Category :

24212400P

Work Category's Description To supply and deliver wet seal for compressor/expander

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|--|--|--------------------------|-------------------|----------------------|-------------------------------|--|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Engineering tools | | | Product supply in compliance to international standards (e.g. API, ASME, etc.) | | | | | |
| | engineering field | Minimum 5 years experience in mechanical rotating related works Trained and certified from Principal | | | | | | | | | | |
| Technician | Principal | Minimum 5 years experience in mechanical rotating related works | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Wet Seal for Compressor/Expander Work Category :

24212400P

Work Category's Description To supply and deliver wet seal for compressor / expander

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---|--|--------------------------|---|----------------------|--|--|
| | Key Personnel | | Facilities | Equipment | Composide Europianos | External Body | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | Required tools for assembly and testing, e.g. alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | Business License from Local Authority DOSH – "Surat Kebenaran Operasi" | Product supply in compliance to international standards (e.g. API, ASME, etc.) |
| Engineer | Degree in Mechanical Engineering or related engineering field | Minimum 5 years experience in mechanical rotating related works Trained and certified from Principal | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) 2. Trained and certified from Principal | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in mechanical rotating related works | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Compressor Repair & Maintenance Air Compressor Services Work Category :

24221210S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment, performance test and commissioning of air compressor and auxiliaries Work Category's Description

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|--|--|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Degree in Mechanical / Electrical / Control Automation / Instrumentation Engineering | repair and maintenance | Workshop facilities and proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklift (or similar lifting facilities), mills, lathe and boring machine, pipe cutting | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | | |
| Supervisor | Electrical / Control Automation / Instrumentation Engineering Or Certificate in related field | years experience in air compressor repair and maintenance Or S years experience in air compressor repair and maintenance | 8 threading hachine, piec cuting 8 threading machine, welding set, balancing machine. | | | | |

Work Category 24221210S

Mechanical Equipment & Services Rotating Equipment Services Compressor Repair & Maintenance Air Compressor Services

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment, performance test and commissioning of air compressor and auxiliaries Work Category's Description

Self-Operated Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|--|---|---|----------------------|---|-----------------------------------|
| Danismakian | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | | | E.g. CIDB, DOSH | g , |
| Engineer | | 3 years experience in air compressor repair and maintenance | proper office setup in Malaysia. Min – overhead / gantry crane, workbench, | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, | | DOSH Certification: Perakuan Mesin Angkat – Overhead Crane | |
| Supervisor | Electrical / Control Automation / Instrumentation Engineering | 5 years experience in air compressor repair and maintenance Or 7 years experience in air | forklift (or similar lifting facilities), mills, lathe and boring machine, pipe cutting & threading machine, welding set, balancing machine. | torque wrench, etc. | | | |
| | | compressor repair and maintenance | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Compressor Repair & Maintenance Centrifugal Compressor Work Category :

24221211\$

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, performance test and commissioning of centrifugal gas compressor and auxiliaries Work Category's Description

Agent Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|--|--|---|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Degree in Mechanical / Electrical / Control Automation / Instrumentation Engineering | years experience in centrifugal gas compressor repair and maintenance Trained and certified from Principal | Workshop facilities and proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklift (or similar lifting facilities), mills, lathe and horizon machine nine cutting. | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | | |
| Supervisor | Diploma in Mechanical / Electrical / Control Automation / Instrumentation Engineering Or Certificate in related field | 3 years experience in centrifugal gas compressor repair and maintenance Or 5 years experience in centrifugal gas compressor repair and maintenance | boring machine, pipe cutting & threading machine, welding set, balancing machine. | | | | |

Work Category

Mechanical Equipment & Services Rotating Equipment Services Compressor Repair & Maintenance Centrifugal Compressor

24221211S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, performance test and commissioning of centrifugal gas compressor and auxiliaries Work Category's Description

Mode of Operation Self-Operated

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|--|--|--|--|----------------------------|---|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Engineer | Degree in Mechanical / Electrical / Control Automation / Instrumentation Engineering | 5 years experience in centrifugal gas compressor repair and maintenance 7 years experience in | proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklift (or similar lifting facilities), mills, lathe and boring machine, pipe cutting & threading machine, welding set, balancing | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | E.g. CIDB, DOSH DOSH Certification: -Perakuan Mesin Angkat – Overhead Crane | |
| Supervisor | Diploma in Mechanical / Electrical / Control Automation / Instrumentation Engineering Certificate in related field | 7 years experience in centrifugal gas compressor repair and maintenance | machine. | | | | |

Work Category : Mechanical Equipment & Services
Rotating Equipment Services

Mechanical Equipment & Services Rotating Equipment Services Compressor Repair & Maintenance Reciprocating/Screw Gas Compressor

24221212S Reciprocating/Screw Gas Compress

Compressor Repair & Maintenance

24221212S Reciprocating/Screw Gas Compress

Work Category's Description : The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment, reciprocating compressor valve refurbishment (inclusive of leak test), performance test and commissioning of reciprocating/screw gas compressor and auxiliaries

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------------------------|---|---|--|---|-------------------------------|-----------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Company/ Principal: Engineer | Degree in Mechanical / Electrical / Control Automation / Instrumentation Engineering | reciprocating / screw gas compressor repair and maintenance 2. Trained and certified from Principal | proper office setup in Malaysia. Min – overhead / gantry crane, workbench, | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, bench test for leak test, etc. | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Compressor Repair & Maintenance Reciprocating/Screw Gas Compressor Work Category

242212125

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment, reciprocating compressor valve refurbishment (inclusive of leak test), performance test and commissioning of reciprocating / screw gas compressor and auxiliaries Work Category's Description

Self-Operated Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|---|--|---|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Electrical / Control Automation / Instrumentation | 3 years experience in reciprocating / screw gas compressor repair and maintenance | Workshop facilities and proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklift (or similar lifting | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, bench test | | DOSH Certification: •Perakuan Mesin Angkat – Overhead Crane | |
| Supervisor | Electrical / Control Automation / Instrumentation Engineering Or | 5 years experience in reciprocating / screw gas compressor repair and maintenance | facilities), mills, lathe and boring machine, pipe cutting & threading machine, welding set, balancing machine. | for leak test, etc. | | | |
| | | 7 years experience in reciprocating / screw gas compressor repair and maintenance | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Mechanical seals Dry Gas Seal Services Work Category :

24221910\$

The provision of labour, materials, consumables, equipments and facilities necessary for removal, refurbish, leak test and installation of dry gas seal Work Category's Description :

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|---|---|-------------------------------|--|----------------------|-------------------------------|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Stalldard | | | | | |
| Engineer | Degree in Mechanical Engineering or related Engineering field | 1.2 years experience in seal repair and maintenance 2.Trained and certified from Principal | Workshop, proper office setup | Personal hand tool, measurement tool, leak test bench, lapping equipment | | | | | | | | |
| Supervisor | | 3 years experience in seal repair and maintenance | | | | | | | | | | |
| | | Or 5 years experience in seal repair and maintenance | | | | | | | | | | |

Work Category : Mechanical Equipment & Services
Rotating Equipment Services
Mechanical seals
24221910S Dry Gas Seal Services

The provision of labour, materials, consumables, equipments and facilities necessary for removal, refurbish, leak test and installation of dry gas seal

Mode of Operation : Self-Operated

Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|-------------------------------|---|-------------------------------|--|--|-----------------------------------|--|--|--|--|--|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| Engineer | Degree in Mechanical | | Workshop, proper office setup | Personal hand tool, measurement tool, leak test bench, lapping equipment | | E.g. CIDB, 503H | | | | | | |
| Supervisor | Engineering field | 7 years experience in seal repair and maintenance 10 years experience in seal repair and maintenance | | | | | | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Mechanical seals Mechanical Seal for Pump Services Work Category

24221911S

The provision of manpower, materials, consumables, equipment and facilities necessary for removal, refurbish, leak test and installation of mechanical seal and auxiliaries for pump equipment Work Category's Description

Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|---|--|--|----------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | - | | | E.g. CIDB, DOSH | |
| | Degree in Mechanical Engineering or any related Engineering field | 1.2 years experience in seal repair and maintenance 2.Trained and certified from Principal | setup | Personal hand tool, measurement tool, leak test bench, lapping equipment | | | |
| 1 | Engineering or any related Engineering field Or | 3 years experience in seal repair and maintenance | | | | | |
| | | Or 5 years experience in seal repair and maintenance | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Mechanical seals Mechanical Seal for Pump Services Work Category

24221911S

The provision of manpower, materials, consumables, equipment and facilities necessary for removal, refurbish, leak test and installation of mechanical seal and auxiliaries for pump equipment Work Category's Description

Self-Operated Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|--|---|--|--|----------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | E.g. 100is | | E.g. CIDB, DOSH | |
| | | 5 years experience in seal repair and maintenance | setup | Personal hand tool, measurement tool, leak test bench, lapping equipment | | | |
| · | Diploma in Mechanical Engineering or any related Engineering field | 7 years experience in seal repair and maintenance | | | | | |
| | Certificate in related field | Or 10 years experience in seal repair and maintenance | | | | | |

Mechanical Equipment & Services
Rotating Equipment Services
Mechanical seals
Wet Seal for Compressor/Expander Services Work Category :

242219128

The provision of labour, materials, consumables, equipments and facilities necessary for removal, refurbish, leak test and installation of wet seal and auxiliaries for compressor/expander Work Category's Description :

Agent Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|---|--------------------------|--|----------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | = | | E.g. CIDB, DOSH | E.g. 130, AFI Stalldard |
| Engineer | Degree in Mechanical Engineering or any related Engineering field | 1.2 years experience in seal repair and maintenance 2.Trained and certified from Principal | | Personal hand tool, measurement tool, leak test bench, lapping equipment | | | |
| Supervisor | Engineering or any related Engineering field Or | 3 years experience in seal repair and maintenance Or 5 years experience in seal | | | | | |
| | | repair and maintenance | | | | | |

Mechanical Equipment & Services
Rotating Equipment Services
Mechanical seals
Wet Seal for Compressor/Expander Services Work Category

24221912S

The provision of labour, materials, consumables, equipments and facilities necessary for removal, refurbish, leak test and installation of wet seal and auxiliaries for compressor / expander Work Category's Description

Self-Operated Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|------------------------------|--|--------------------------|--|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | | |
| Engineer | | 5 years experience in seal repair and maintenance | | Personal hand tool, measurement tool, leak test bench, lapping equipment | | | |
| Supervisor | Engineering field | 7 years experience in seal repair and maintenance | | | | | |
| | Or | | | | | | |
| | Certificate in related field | Or | | | | | |
| | | 10 years experience in seal repair and maintenance | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Turbines Gas Turbine Services Work Category :

24222210S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment and performance test of gas turbine and auxiliarities Work Category's Description :

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|---|---|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Degree in Mechanical / Electrical / Control Automation / Instrumentation | 1.3 years experience in gas turbine repair | proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklift (or similar lifting | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | E.g. GIDB, DOSH | |
| Supervisor | Electrical / Control Automation / Instrumentation Engineering Or Certificate in related field | years experience in gas turbline repair and maintenance Or 7 years experience in gas turbline repair and maintenance maintenance | facilities), mills, lathe and boring machine, pipe cutting & threading machine, welding set, balancing machine. | | | | |

Mechanical Equipment & Services Rotating Equipment Services Turbines Gas Turbine Services Work Category 24222210S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment and performance test of gas turbine and auxiliaries Work Category's Description

Mode of Operation Self-Operated

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|--|--|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Automation / Instrumentation EngineeringDiploma in | 5 years experience in gas turbine repair and maintenance? years experience in gas turbine repair and maintenance | Workshop facilities and proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklif (or similar lifting facilities), mills, lathe and boring machine, pipe cutting & threading machine, welding set, balancing machine, | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | DOSH Čertification: -Perakuan Mesin Angkat – Overhead Crane | |
| Supervisor | Automation / Instrumentation Engineering Or Certificate in related field | 7 years experience in gas turbine repair and maintenance Or 10 years experience in gas turbine repair and maintenance | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Turbines Hydraulic Turbine Work Category : 24222211S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment and performance test of hydraulic turbine and auxiliaries Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------|--|---|--|--|----------------------|--|-----------------------------------|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | |
| Engineer | Degree in Mechanical Engineering or related Engineering field | maintenance 2.Trained and certified from Principal | Workshop facilities and proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklift (or similar lifting facilities), mills, lathe and | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | 2.g. 0.00, 200. | | | |
| Supervisor | Diploma in Mechanical Engineering or related Engineering field Or Certificate in related field | years experience in turbine repair and maintenance Or years experience in turbine repair and maintenance | boring machine, pipe cutting & threading machine, welding set, balancing machine. | | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Turbines Hydraulic Turbine Work Category

24222211S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment and performance test of hydraulic turbine and auxiliaries Work Category's Description

Mode of Operation Self-Operated

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|--|--|---|---|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | | | E.g. CIDB, DOSH | |
| Engineer | Degree in Mechanical Engineering or related Engineering field | , | proper office setup in Malaysia. Min – overhead / | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, | | DOSH Certification: •Perakuan Mesin Angkat – Overhead Crane | |
| Supervisor | Diploma in Mechanical Engineering or related Engineering field Or Certificate in related field | 5 years experience in turbine repair and maintenance Or 7 years experience in turbine | forklift (or similar lifting facilities), mills, lathe and boring machine, pipe cutting & threading machine, welding set, balancing machine. | torque wrench, etc. | | | |
| | | repair and maintenance | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Turbines Steam Turbine Services Work Category : 242222128

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment and performance test of steam turbine and auxiliaries Work Category's DeSIription

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|--|--|--|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Degree in Mechanical Engineering or related Engineering field | 1.3 years experience in steam/gas turbine repair and maintenance 2.Trained and certified from Principal | Workshop facilities and proper office setup in Malaysia. Min — overhead / gantry crane, workbench, forklift (or similar lifting facilities), mills, lathe and boring machine, pipe cutting | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | g. 0.02,2001 | |
| Supervisor | Diploma in Mechanical Engineering or related Engineering field Or Certificate in related field | 3 years experience in steam/gas turbine repair and maintenance Or 5 years experience in steam/gas turbine repair and maintenance | & threading machine, welding set, balancing machine. | | | | |

Mechanical Equipment & Services Rotating Equipment Services Turbines Steam Turbine Services Work Category

242222128

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment and performance test of steam turbine and auxiliaries Work Category's Description

Self-Operated Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|--|--|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Degree in Mechanical Engineering or related Engineering fieldDiploma in Mechanical Engineering or related Engineering field | 5 years experience in steam/gas turbine repair and maintenance5 years experience in steam/gas turbine repair and maintenance | Workshop facilities and proper office setup in Malaysia. Min – overhead / gantry crane, workbench, forklift (or similar lifting facilities), mills, lathe and boring machine, pipe cutting | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | e.g. clibs, DOSH DOSH Certification: Perakuan Mesin Angkat – Overhead Crane | |
| Supervisor | Or | 5 years experience in steamigas turbine repair and maintenance Or 7 years experience in steamigas turbine repair and maintenance | & threading machine, welding set, balancing machine. | | | | |

Mechanical Equipment & Services Rotating Equipment Services Turbo Expander Maintenance Work Category : 24222300S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment, performance test and commissioning of turbo expander and auxiliaries Work Category's Description

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|--|--|--|----------------------|----------------------------|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Engineer | Degree in Mechanical Engineering or related Engineering field | 1.3 years experience in turbo expander repair and maintenance 2.Trained and certified from Principal | | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | E.g. CIDB, DOSH | • |
| Supervisor | Engineering field Or | 5 years experience in turbo expander repair and maintenance Or 7 years experience in turbo expander repair and maintenance | boring machine, pipe cutting & threading machine, welding set, balancing machine. | | | | |

| Work Category | : | Mechanical Equipment & Services Rotating Equipment Services |
|-----------------------------|---|---|
| | | 24222300S Turbo Expander Maintenance |
| Work Category's Description | : | The provision of labour, materials, consumables, equipments and facilities necessary for maintenance, repair, overhaul, refurbishment, performance test and commissioning of turbo expander and auxiliaries |
| Mode of Operation | : | Self-Operated |

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|---|---|--|--|--|----------------------|--|-----------------------------------|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Degree in Mechanical Engineering or related Engineering fieldDiploma in Mechanical Engineering or related Engineering field | 5 years experience in turbo expander repair and maintenance7 years experience in turbo expander | Workshop facilities and proper office setup in Malaysia. Min – overhead / r gantry crane, workbench, forklift (or similar lifting facilities), mills, lathe and boring machine, pipe cutting | Required tools for overhaul, e.g. shaft straightening tools, alignment tools, measuring tools, machine shop tools, torque wrench, etc. | | DOSH Certification: •Perakuan Mesin Angkat – Overhead Crane | |
| Supervisor | Diploma in Mechanical Engineering or related Engineering field Or | 7 years experience in turbo expander repair and maintenance | & threading machine, welding set, balancing machine. | | | | |
| | Certificate in related field | Or 10 years experience in turbo expander repair and maintenance | | | | | |

Mechanical Equipment & Services Rotating Equipment Services Vibrating Screen Work Category

24222400S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance and repair of vibrating screen Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|--|---|--------------------------|---------------------|-------------------------------|-----------------------------------|------------------------|--|--|
| Key Personnel | | | Equipment E.g. Tools | | External Body Registration | Quality E.g. ISO. API Standard | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | E.g. Tools | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | |
| | SPM or certificate in related field | 3 years experience in mechanical maintenance | Proper Office Setup | Personal Hand Tools | | | | | |

| Work Category | : | | Mechanical Equipment & Services |
|-----------------------------|---|---|--|
| | | | Static Equipment |
| | | 24231100P | Coalescer |
| Work Category's Description | : | To design, supply, fabricate mm wall thickness) | , inspect, test and deliver Coalescer for Unfired Pressure Vessel Class I (<32 mm wall thickness), Class II (32-50 mm wall thickness) and Class III (>50 |

| | | mm wa |
|-------------------|---|-------|
| Mode of Operation | : | Agent |

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|---|--------------------------|------------|--|-------------------------------|------------------------|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| Coordinator | | Minimum 3 years experience in project management | Office Setup | | Principal to have minimum 10 years experience in Coalescer | | | | |

Work Category : Mechanical Equipment & Services Static Equipment Coalescer

Work Category's Description : To design, supply, fabricate, inspect, test and deliver Coalescer for Unfired Pressure Vessel Class I (<32 mm wall thickness), Class II (32-50 mm wall thickness) and Class III (>50 mm wall thickness)

Mode of Operation : Manufacturer

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|-------------------------------------|--|--|---|----------------------|---|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Fabrication Yard/ Fabrication & Assembling facilities | Lifting Facilitates (i.e. Overhead Crane, forklift) Welding facilities A. Access to NDT and heat treatment facilities/services 4. Access to rolling machine 5. Cutting & bending machine 6. Access to blasting & painting facilities / services | | Business License from local authority DOSH — "Surat sebagai syarıkat pembuat pengandung /bejana tekanan tak berapi" | |
| Production Manager | | Minimum 5 years experience in pressure vessel fabrication Or Minimum 7 years experience in pressure vessel fabrication | | Testing facilities (e.g pressure test, hydrotest and etc.) | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in pressure vessel design | | | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in pressure vessel design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Static Equipment Other Static Equipment Work Category 24231800P

To design, supply, fabricate, inspect, test and deliver such Other Static Equipment such as but not limited to Spheres for Unfired Pressure Vessel Class I (<32 mm wall thickness) and Class II (32-50 mm wall thickness), aviation Filter Vessel (Jet A1 & Avgas) Parts e.g. side glass, slug valve, air eliminator, etc. for Unfired Pressure Vessel Class I (<32 mm wall thickness) and other static equipment Work Category's Description

Mode of Operation Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|--|------------------------|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Expendice | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | | Business License from local authority DOSH – "Surat sebagai syarikat pembuat pengandung hejana tekanan tak berapi" | | | |

| Work Category | : | | Mechanical Equipment & Services Static Equipment |
|-----------------------------|---|------------------------------|---|
| | | 24232000P | Strainer |
| Work Category's Description | : | To design, supply, fabricate | e, inspect, test and deliver Strainer for Unfired Pressure Vessel Class I (<32 mm wall thickness), Class II (32-50 mm wall thickness) and Class III (>50 mm |

Mode of Operation : Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|------------|---|-------------------------------|------------------------|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Expenence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | Principal to have minimum 10 years experience in strainer | | | | | |

| Work Category | : | 24232000P | Mechanical Equipment & Services Static Equipment Strainer |
|-----------------------------|---|--|--|
| Work Category's Description | ŧ | To design, supply, fabricate wall thickness) | , inspect, test and deliver Strainer for Unfired Pressure Vessel Class I (<32 mm wall thickness), Class II (32-50 mm wall thickness) and Class III (>50 mm |
| Mode of Operation | : | Manufacturer | |

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---|--|---|---|----------------------|---|-----------------------------------|
| Designation | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Fabrication Yard/ Fabrication & Assembling facilities | Lifting Facilitates (i.e. Overhead Crane, forklift) Pressure Vessel Design software A. Access to rolling machine Cutting & bending machine S. Welding facilities 6. Access to blasting & painting facilities / services | | Business License from local authority Z.DOSH — "Surat sebagai syarikat pembuat pengandung /bejana tekanan tak berapi" | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in pressure vessel fabrication Or Minimum 7 years experience in pressure vessel fabrication | | 7. Testing facilities (e.g pressure test, hydrotest and etc.) 8. Access to NDT and heat treatment facilities/services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in pressure vessel design | | | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in pressure vessel design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Static Equipment Towers Work Category 24232100P

To design, supply, fabricate, inspect, test and deliver of Towers for Unfired Pressure Vessel Class I (<32 mm wall thickness), Class II (32-50 mm wall thickness) and Class III (>50 mm wall thickness) Work Category's Description

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------------|---|--|---|---|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in project management Or Minimum 7 years experience in project management | Office Building Fabrication Yard/ Fabrication & Assembling facilities | Lifting Facilitates (i.e. Overhead Crane, forklift) Pressure Vessel Design software A. Access to rolling machine Cutting & bending machine S. Welding facilities 6. Access to blasting & painting facilities / services | | 1.Business License from local authority 2.DOSH – "Surat sebagai syarikat pembuat pengandung/bejana tekanan tak berapi" | |
| Production Manager | Degree in Mechanical Engineering Or Diploma in Mechanical Engineering | Minimum 5 years experience in pressure vessel fabrication Or Minimum 7 years experience in pressure vessel fabrication | | 7. Testing facilities (e.g pressure test, hydrotest and etc.) 8. Access to NDT and heat treatment facilities/services | | | |
| Engineering Manager | Degree in Mechanical Engineering | Minimum 5 years experience in pressure vessel design | | | | | |
| Design Engineer | Degree in Mechanical Engineering | Minimum 3 years experience in pressure vessel design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Fact Ory Acceptance Test (FAT) | | | | | |

Mechanical Equipment & Services Static Equipment Services Atmospheric Storage Tank Cleaning, Repair and Maintenance Work Category :

24241010S

The provision of manpower, materials, consumables, equipment and facilities necessary for cleaning/manual desludging, repair, maintenance, calibration and testing of atmospheric storage tank storing white products/media (other than crude oil, LSWR, bitumen) in compliance to API:653 requirements Work Category's Description

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | |
|-------------------------------|---|---|--|---|---|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Diploma in any Discipline | Shall have minimum 7 years experience in oil & gas industry in mechanical work and Involved in a minimum of 1 Tank job as a Project Manager in Cleaning, Repair and Maintenance in the past 7 years in oil & gas or Minimum 7 years experience as Project Engineer in Cleaning, Repair and Maintenance in the past 7 years in oil & gas or the past 7 years in oil & gas | Ownership/lease of the following facilities: 1. Proper office 2. Operational workshop 3. Fabrication yard | Ownership/lease of the following equipment: 1. High Pressure Waterjet 2. Air compressor 3. Hand tools 4. Proof Lighting 5. Pneumatic 20' and 24" Air Blower Blower 6. Breathing Apparatus 7. Diaphragm pump 8. Welding Machine 9. Cranes 10. Blasting and Painting equipment | Minimum 2 tanks cleaning, repair & maintenance, including blasting, painting and hot work at tank shell and bottom platej in Oil and Gas industry for the last 7 years or Minimum 2 tanks construction of storage tank and minimum 1 cleaning, repair & maintenance (including blasting, painting and hot work at tank shell and bottom plate) in Oil and Gas industry for the last 7 years | N/A | N/A |
| Project Engineer | Diploma in Engineering Discipline and Valid NIOSH Confined Space Certification | Shall have minimum 5 years experience in oil & gas industry in mechanical work and involved in a minimum of 1 Tank job as a Project Engineer in Cleaning, Repair and Maintenance in the past 7 years in oil & gas | | | Minimum 5 completed Tank Hygienic Clearing jobs and minimum 1 repair & maintenance (including blasting, painting and hot work at tank shell and bottom pitale) in Oil & Gas industry for the last 7 years | | |
| Site Supervisor | SPM or equivalent certificate in related field and Valid NIOSH Confined Space Certification | 5 years experience as Site Supervisor in Mechanical Maintenance and Repair work | | | | | |
| Safety Officer | SPM or equivalent certificate in related field and registered DOSH green book | Safety Officer who possesses valid National Institute of Cocupational Safety & Health (NIOSH) certificate and have minimum 5 years working experience as Safety Officer in the oil & gas industry. or Safety Officer who possesses equivalent recognized certificates to NIOSH shall have minimum 8 years working experience as Safety Officer in the oil & gas industry. | | | | | |
| QA/QC Supervisor | Diploma / certificate in any Engineering discipline | QA/QC Supervisors shall have minimum 5 years experience in the oil & gas industry as a QA/QC supervisor in fabrication/repair of pressure vessels or storage tank or piping in mechanical field | | | | | |

Mechanical Equipment & Services Static Equipment Services Atmospheric Storage Tank Desludging, Recovery & Cleaning : Work Category

24241011S

Work Category's Description :

The provision of manpower, materials, consumables, equipment and facilities necessary to remove the sludge of black products/media (crude oil, LSWR, biltumen) with recovery process whenever possible, and cleaning of storage tank/pond prior to repair and maintenance job at atmospheric tank/pond

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|------------------|---|---|--|--|---|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Diploma in any Discipline | Shall have minimum 7 years experience in oil & gas industry in mechanical work and Involved in a minimum of 1 Tank job as a Project Manager in Desludging, Recovery and Cleaning works in the past 7 years in oil & gas or Minimum 7 years experience as Project Engineer in Desludging, Recovery and Cleaning works in the past 7 years in oil & gas | Ownership/lease of the following facilities: 1. Proper office 2. Operational workshop | Ownershipflease of the following equipment: 1. High Pressure Waterjet 2. Air compressor 3. Hand tools 4. Proof Lighting 5. Pneumatic 20" and 24" Air Blower 6. Breathing Apparatus 7. Diaphragm pump 8. Centrifuge/Phase Separator 9. Mechanize hydraulically operated sludge removing equipment | Minimum 1 crude oil storage tank job in destudging and cleaning activities in Oil & Gas industry for the last 7 years or Minimum 5 tanks cleaning, repair & maintenance (including blasting, painting and hot work at tank shell and bottom plate) in Oil and Gas industry for the last 7 years | N/Á | N/A |
| Project Engineer | Diploma in Engineering Discipline and Valid NIOSH Confined Space Certification | Shall have minimum 5 years experience in oil & gas industry in mechanical work and Involved in a minimum of 1 Tank job as a Project Engineer in Desludging, Recovery and Cleaning works in the past 7 years in oil & gas | | | | | |
| Site Supervisor | SPM or equivalent certificate in related field and Valid NIOSH Confined Space Certification | 5 years experience as Site Supervisor in Mechanical Maintenance and Repair work | | | | | |
| Safety Officer | SPM or equivalent certificate in related field and registered DOSH green book | | | | | | |
| QA/QC Supervisor | Diploma / certificate in any Engineering discipline | QA/QC Supervisors shall have minimum 5 years experience in the oil 8 gas industry as a QA/QC supervisor in fabrication/repair of pressure vessels or storage tank or piping in mechanical field and QA/QC Supervisors shall possess desludging and recovery processing knowledge. | | | | | |

Mechanical Equipment & Services Static Equipment Services Atmospheric Storage Tank Hygienic Cleaning Work Category :

24241012S

The provision of manpower, materials, consumables, equipment and facilities necessary for hygienic cleaning, calibration and testing of atmospheric storage tank storing jet-fuel and diesel products in compliance to Aviation Authority requirement Work Category's Description :

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|------------------|---|---|---|---|--|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project Manager | Diploma in any discipline | | Ownership/lease of the following facilities: 1. Proper office 2. Operational workshop | Ownership/lease of the following equipment: 1. High Pressure Waterjet 2. Air compressor 3. Hand tools 4. Proof Lighting 5. Pneumatic 20" and 24" Air Blower 6. Breathing Apparatus 7. Diaphragm pump | Minimum 3 completed Tank Hyglenic Cleaning jobs in Oil & Gas industry for the last 7 years or Minimum 5 completed Vessel Maintenance jobs in Oil & Gas industry for the last 7 years | N/A | N/A |
| Project Engineer | Diploma in Engineering Discipline and Valid NIOSH Confined Space Certification | Shall have minimum 3 years experience in oil & gas industry in mechanical work and Involved in a minimum of 1 Tank job as a Project Engineer in Hygienic Cleaning works in the past 7 years in oil & gas | | | | | |
| Site Supervisor | SPM or equivalent certificate in related field and Valid NIOSH Confined Space Certification | 5 years experience as Site Supervisor in Mechanical Maintenance and Repair work | | | | | |
| Safety Officer | SPM or equivalent certificate in related field and registered DOSH green book | Safety Officer who possesses valid National Institute of Occupational Safety & Health (NIOSH) certificate and have minimum 5 years working experience as Safety Officer in the oil & gas industry. or Safety Officer who possesses equivalent recognized certificates to NIOSH shall have minimum 8 years working experience as Safety Officer in the oil & gas industry. | | | | | |

Mechanical Equipment & Services Static Equipment Services Decoking Work Category :

24241300S

Work Category's Description The provision of manpower, materials, consumables, equipment and facilities necessary for decoking

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------------|-----------------------------------|------------------------------------|---------------------------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Expenence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | Degree in Mechanical Engineering | 3 years experience in Decoking | Proper office setup in Malaysia | Pigging machine and accessories | | | | | | | |
| Supervisor | SPM Or equivalent | 5 years experience in Decoking | | | | | | | | | |

Work Category : Mechanical Equipment & Services
Static Equipment Services
24241400S Furnaces & Fired Heaters

Work Category's Description : The provision of manpower, materials, consumables, equipment and facilities necessary for cleaning, repair, maintenance, testing and commissioning of Furnaces, fired heaters & flares

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------|---|---|---|--|-----------------------------------|-----------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warenbuoe, Dookyara | 2.g. 100.0 | | E.g. CIDB, DOSH | 2.g. 100, 7t. 10tanda.u | | | | |
| Project Engineer | Degree in Mechanical Engineering | 3 years experience in static fired equipment repair & maintenance | Proper office & operational workshop | Waterjet /hydrojet Air compressor Access to lifting equipment | | | | | | | |
| Site Supervisor | Diploma in Mechanical Engineering Or Certificate in engineering | 5 years experience in static fired equipment repair & maintenance Or 10 years experience in static fired equipment repair & maintenance | | 4. Hand tools 5. Generator set, 6. Welding set, 7. Ventilator | | | | | | | |

Work Category : Mechanical Equipment & Services
Static Equipment Services
424241600S Hydraulic Bolt Tensioning & Bolt Torquing Services

Work Category's Description : The provision of labour, materials, consumables, equipments and training necessary for hydraulic bolt tensioning and bolt torquing services

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|-------------|---|--|--|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Engineer | Engineering Or relevant field | 3 years experience in bolt tensioning and bolt torquing services in oil & gas industry | Proper office & operational workshop | Calibrated bolt tensioning equipment Calibrated bolt torqueing equipment Access to underwater | | • • | |
| Supervisor | Diploma in Mechanical Engineering Or relevant field Or Certificate inrelated field | N/A | | S. Access of inter-waters services (e.g.divers) *Company to provide the list of equipment, quantity, owned/rent, owner (if rented). | | | |

Work Category : Mechanical Equipment & Services
Static Equipment Services

Mechanical Equipment & Services Static Equipment Services Non-Atmospheric Storage Tank Cryogenic Storage Tank

24241910S Cryogenic Storage Tan

Work Category's Description : The provision of manpower, materials, consumables, equipment and facilities necessary for cleaning, repair, maintenance, testing and commissioning of cryogenic storage tank

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-----------------|--|--|---|--|-------------------------------|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 130, AFI Stalldard | | | | |
| | discipline or Diploma in Civil / Mechanical | | workshop Stationary Equipment Repair | Waterjet /hydrojet Air compressor Access to lifting equipment Hand tools | | | | | | | |
| | | 5 years experience in tank maintenance & repair | | 4. Hand tools | | | | | | | |
| Site Supervisor | | 5 years experience in tank maintenance & repair | | | | | | | | | |

Mechanical Equipment & Services Water Treatment Equipment Electro De-ionization (EDI) Work Category :

24271100P

Work Category's Description : To design, supply, fabricate, deliver, install, testing and commissioning of Electro De-ionization (EDI)

Mode of Operation Agent

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|------------|--------------------------|----------------------|---|-----------------------------------|------------------------|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | Principal to have minimum 5 years experience in manufacture, supply and provision of associated services and minimum 10 proven track record in the field of Electro De-ionization (EDI) System | | |

Work Category : Mechanical Equipment & Services
Water Treatment Equipment
24271200P Fresh Water Reverse Osmosis

Work Category's Description : To design, supply, fabricate, deliver, install, testing and commissioning of Reverse Osmosis

Mode of Operation : Agent

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|--|--------------------------|----------------------|---|-----------------------------------|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | L.g. Warehouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard |
| | | | | | Principal to have minimum 5 years experience in manufacture, supply and provision of associated services and minimum 10 proven track record in the field of reverse Osmosis System | | |

Work Category : Mechanical Equipment & Services
Water Treatment Equipment
24271300P Micro/Ultra/Nano Filter

Work Category's Description : To design, supply, fabricate, deliver, install, testing and commissioning of Micro/Ultra/Nano Filter

Mode of Operation : Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Warenouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | | | Principal to have minimum 5 years experience in manufacture, supply and provision of associated services and minimum 10 proven track record in the field of Micro / Ultra Fitter system | | | | | | |

Mechanical Equipment & Services Hoisting & Lifting Equipment Pedestal Crane Work Category :

24172000P

Work Category's Description : To design, assemble, supply, deliver, install, hook up, test, commission pedestal crane and conduct training on operation

Mode of Operation Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|-------------------------|--------------------------|-------------------------------|-----------------------------------|---|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | Business License from local authority 2.DOSH – "Surat sebagai syarikat pembuat struktur mesin angkat" | | | | | | |

Mechanical Equipment & Services Hoisting & Lifting Equipment Elevator/Lifts Work Category :

24181000S

Work Category's Description The provision of manpower, materials, consumables, equipment and facilities necessary for overhaul, refurbish, maintenance, testing and certificate validation of elevator/lifts

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|-------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyaru | E.g. Tools | | E.g. CIDB, DOSH | E.g. 130, AFI Standard | | | | |
| | | | | | | DOSH - Pemasang, Penyelenggara & Pemasang Lif, Eskalator & Dumbwaiter | | | | | |

Work Category : Mechanical Equipment & Services
Hoisting & Lifting Equipment
24181600S Offshore Crane

Work Category's Description : The provision of manpower, materials, consumables, equipment and facilities necessary for overhaul, refurbish, maintenance, testing and certificate validation of offshore cranes

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|---------------------------|----------------------|-------------------------------|--|-------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | L.g. Walerlouse, Dockyaru | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | | |
| | | | | | | 1.DOSH – "Surat sebagai syarikat pembuat struktur mesin angkat" or 2.DOSH – "Surat sebagai Syarikat Pemasang, Penyelenggara & Perombak Mesin Angkat" | | | | | |

Work Category : Mechanical Equipment & Services
Hoisting & Lifting Equipment
24181700S Overhead Crane Services

Work Category's Description : The provision of manpower, materials, consumables, equipment and facilities necessary for overhaul, refurbish, maintenance, testing and certificate validation of overhead cranes

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|-------------------------------|-----------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | DOSH – "Surat sebagai syarikat pembuat struktur mesin angkat" | | | | | |

Mechanical Equipment & Services Mechanical Engineering Consultancy Static & Piping Consultancy Work Category : 24191100S

The provision to conduct static & piping basic engineering study such as but not limited to mechanical asset life study, lifting study, mechanical audit & assessment and operations & maintenance strategy Work Category's Description

Self-operated Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|--|------------------------|--|--|--|--|
| Key Personnel | | Facilities | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | Personnel to be registered with BEM as a professional engineer | | | | | |

| Work Category | : | | Mechanical Equipment & Services |
|---------------|---|-----------|---------------------------------|
| | | | Static Equipment |
| | | 24231900P | Pressure Vessel |

Work Category's Description : To design, supply, fabricate, inspect, test and deliver of Unfired Pressure Vessel Class I (<32 mm wall thickness), Class II (32-50 mm wall thickness) and III (>50 mm wall thickness)

Mode of Operation : Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | | |
| | | | | | | Business License from local authority LOOSH — "Surat sebagai syarikat pembuat pengandung/bejana tekanan tak berapi" | | | | | |

Work Category : Mechanical Equipment & Services
Static Equipment Services
24241100S Boilers Services

Work Category's Description : The provision of manpower, materials, consumables, equipments and facilities necessary for cleaning, repair, maintenance, pressure testing and commissioning of boilers

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|----------------------|--------------------------|----------------------|-------------------------------|---|------------------------|
| Key Personnel | | Facilities Equipment | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | | DOSH – "Surat sebagai pembaikpulih dandang stim" | |

Work Category : Mechanical Equipment & Services
Static Equipment Services
Columns, Stripper & Corrugated Plate Interceptor

Work Category's Description : The provision of manpower, materials, consumables, equipments and facilities necessary for cleaning, repair, testing and maintenance of columns, strippers & corrugated plate interceptor

interceptor

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|----------------------|--------------------------|-------------------------------|-----------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | DOSH - "Surat sebagai pembaikpulih pengandung/bejana tekanan tak berapi" | | | | | |

Mechanical Equipment & Services Static Equipment Services Heat Exchangers, Condensers & Cooler Work Category : 24241500S

The provision of manpower, materials, consumables, equipments and facilities necessary for cleaning, repair, maintenance, pressure testing and commissioning of heat exchanger (including condensers, cooler and air fin cooler) Work Category's Description

Self-operated Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|-------------------------------|-----------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | |
| | | | | | | DOSH - "Surat sebagai pembaikpulih pengandung/bejana tekanan tak berapi" | | | | | |

Work Category : Mechanical Equipment & Services
Static Equipment Services
24242100S Pressure & Unpressurized Vessel

Work Category's Description : The provision of manpower, materials, consumables, equipment and facilities necessary for cleaning, repair, testing maintenance and commissioning of pressure & unpressurized vessels

: Self-operated

Mode of Operation

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------------------|---------------|--|--------------------------|-------------------------------|---------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 1001s | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | DOSH - "Surat sebagai pembaikpulih pengandung/bejana tekanan tak berapi" | | | | | |

| Work Category | : | | Mechanical Equipment & Services Static Equipment Services |
|---------------|---|-----------|---|
| | | 24242200S | Reactors |
| | | | |

Work Category's Description : The provision of manpower, materials, consumables, equipment and facilities necessary for cleaning, repair, testing and maintenance of reactors (excluding catalyst absorbant changeout)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|-------------------------------|---|------------------------|--|--|--|--|
| Key Personnel | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 1001s | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | DOSH - "Surat sebagai pembaikpulih pengandung/bejana tekanan tak berapi" | | | | | |

Work Category : Office, Administration & Professional Services
Laboratory Services
25161000S External Laboratory Analysis Services

Work Category's Description : The provision of external laboratory analysis services for sample testing

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------|-------------------------------|--|--------------------------|---|----------------------|--|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Advisor | Applied Chemistry/ Industrial | | Operational Laboratory | Laboratory equipment used to conduct sample analysis (E.g. liquid hydro carbon sample, gas sample, water | | Business License from Local Authority | |
| Chemist | Applied Chemistry/ Industrial | Minimum of 3 years experience in Oil & Gas Chemical Analytical Testing | | sample and etc) | | | |
| Lab Technician | Applied Chemistry/ Industrial | Minimum of 1 years experience in Oil & Gas Chemical Analytical Testing | | | | | |

Work Category : Office, Administration & Professional Services

Laboratory Services
Laboratory Equipment Calibration Services

Work Category's Description : The provision of calibration services for laboratory equipment and apparatus

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|--------------------------|---|---|--|--|----------------------|--|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company 3 Expendice | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Service Engineer/Chemist | Degree in any engineering or chemistry | Minimum of 7 years experience in laboratory equipment repair or maintenance or calibration | Permanent office setup Calibration lab | Laboratory equipment and apparatus used to conduct calibration (E.g. standard weight, reference thermometer, temperature | | Business License from Local Authority | |
| Service Technician | engineering or chemistry or Min Certificate in any engineering or chemistry | Minimum of 3 years experience in laboratory equipment repair or maintenance or calibration or Minimum of 5 years experience in laboratory equipment repair or maintenance or calibration | | controlled bath and etc) | | | |

Work Category : Office, Administration & Professional Services
Laboratory Services
Laboratory Operation Services
Laboratory Operation Services

Work Category's Description : The provision of analysis, equipment calibration, repair & maintenance , consultancy and associated services in laboratory operation services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|-------------|--|--|--------------------------|---|----------------------|--|------------------------|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | Applied Chemistry/ Industrial Chemistry | Minimum of 10 years experience in Oil & Gas Analytical Testing and laboratory management. | Operational Laboratory | Laboratory equipment used to conduct sample analysis (E.g. liquid hydro carbon sample, gas sample, water | | Business License from Local Authority | | | |
| | Applied Chemistry/ Industrial | Minimum of 5 years experience in Oil & Gas Analytical Testing | | sample and etc) | | | | | |
| | Applied Chemistry/ Industrial | Minimum of 2 years experience in Oil & Gas Analytical Testing | | | | | | | |

Work Category : Office, Administration & Professional Services

Business Travel Management

25121500S Travel Management Companies (TMC)

Work Category's Description : The provision of travelling support services such as but not limited to ticket booking, room reservations and transport arrangements

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | , , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | | | | | Registration with Ministry of Culture, Arts & Tourism Malaysia Excluding services at KLCC- Petronas Twin Towers | | | | |

| Work Category | : | | Office, Administration & Professional Services |
|-----------------------------|---|-----------------------------------|--|
| | | | Laboratory Services |
| | | 25161100S | HSE Laboratory Services |
| Work Category's Description | ŧ | The provision of HSE labor wastes | ratory services for Chemical/Biological/Environment monitoring (mercury, heavy metal) & radiological, fire forensic, hydrocarbon finger printing and |

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|--------------------------|------------|----------------------|---|------------------------|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company C Expension | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | | Skim Akreditasi Makmal Malaysia (SAMM) | | | |

Work Category : Office, Administration & Professional Services
Office/Residential Equipment & Building Services
25201200S Printing, Binding, Photostating, Scanning, Digitising & Photography

Work Category's Description : The provision of printing, binding, photostating, scanning, digitizing and drawing reproduction

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|------------|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | | | | | "Lesen mesin cetak" (KDN) | | | |

Office, Administration & Professional Services Catering Offshore Catering Work Category :

25131100S

Work Category's Description The provision of offshore catering and related services

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|---------------|--|--|-------------------------|---|-------------------------------|-----------------------------------|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockvard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | |
| Operations Manager | | Minimum 5 years experience in managing catering services | | | catering with minimum of 50 pax served | System of Malaysia (FOSIM) | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Bends Work Category :

26101200P

Work Category's Description : To supply and deliver hot/induction bend

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|--|-------------------------------|---|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| Project Manager | field | Minimum 7 years experience in managing procurement of bends / pipes | | | | | | | |
| Project Engineer | field | Minimum 5 years experience in managing procurement of bends / pipes | | | | | | | |
| Procurement Coordinator / Executive | field | Minimum 3 years experience in procurement of bends / pipes | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Carbon Steel Seamless Pipes Work Category :

26101300P

Work Category's Description To supply and deliver carbon steel seamless pipes

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--|---------------------------------|---|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project Manager | | Minimum 7 years experience in managing procurement of pipes | | | | | | | | | |
| Project Engineer | Degree in any Engineering field | Minimum 5 years experience in managing procurement of pipes | | | | | | | | | |
| Procurement Coordinator / Executive | | Minimum 3 years experience in procurement of pipes | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Carbon Steel Welded Pipes Carbon Steel - Electric Resistance Welded (ERW) Pipes Work Category :

26101410P

Work Category's Description : To supply and deliver carbon steel ERW pipes

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|---|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Manager | field | Minimum 7 years experience in managing procurement of pipes | | | | | | | | | | |
| Project Engineer | field | Minimum 5 years experience in managing procurement of pipes | | | | | | | | | | |
| Procurement Coordinator / Executive | | Minimum 3 years experience in procurement of pipes | | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Carbon Steel Welded Pipes Carbon Steel - Longitudinal Submerged Arc Welded (LSAW) Pipes Work Category :

26101411P

Work Category's Description : To supply and deliver carbon steel LSAW pipes

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|-------------------------------|---|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Manager | field | Minimum 7 years experience in managing procurement of pipes | | | | | | | | | | |
| Project Engineer | field | Minimum 5 years experience in managing procurement of pipes | | | | | | | | | | |
| Procurement Coordinator / Executive | | Minimum 3 years experience in procurement of pipes | | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Carbon Steel Welded Pipes Carbon Steel - Spiral Submerged Arc Welded (SSAW) Pipes : Work Category

26101413P

Work Category's Description : To supply and deliver carbon steel SSAW pipes

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|--|------------------------------------|---|--------------------------|----------------|----------------------|-------------------------------|------------------------|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Manager | Degree in any Engineering field | Minimum 7 years experience in managing procurement of pipes | | | | | |
| Project Engineer | Degree in any Engineering field | Minimum 5 years experience in managing procurement of pipes | | | | | |
| Procurement Coordinator / Executive | Degree in any Engineering field | Minimum 3 years experience in procurement of pipes | | | | | |

Work Category : Oil Country Tubular Goods (OCTG) & Line Pipes
Line Pipes
26101500P Corrosion Resistance Alloy (CRA) Clad

Work Category's Description : To supply and deliver Corrosion Resistance Alloy (CRA) Clad such as but not limited to Metallurgical and Mechanical

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------------------------|-------------------------------|--|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project Engineer | discipline/field | Minimum 7 years experience in managing procurement of pipes/ bends | | | | | | | | | |
| Engineer | discipline/field | Minimum 5 years experience in managing procurement of pipes/ bends | | | | | | | | | |
| Procurement Coordinator/ Executive | discipline/field | Minimum 3 years experience in procurement of pipes/ bends | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Cupro Nickle Seamless Pipes Work Category :

26101600P

To supply and deliver cupro nickle seamless pipes Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|--|---------------------------------|---|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Manager | Degree in any Engineering field | Minimum 7 years experience in managing procurement of pipes | | | | | | | | | | |
| Project Engineer | Degree in any Engineering field | Minimum 5 years experience in managing procurement of pipes | | | | | | | | | | |
| Procurement Coordinator / Executive | | Minimum 3 years experience in procurement of pipes | | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Duplex Stainless Steel Seamless Pipes Work Category :

26101800P

Work Category's Description To supply and deliver duplex stainless steel seamless pipes

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--|-------------------------------|---|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project Manager | field | Minimum 7 years experience in managing procurement of pipes | | | | | | | | | |
| Project Engineer | field | Minimum 5 years experience in managing procurement of pipes | | | | | | | | | |
| Procurement Coordinator / Executive | | Minimum 3 years experience in procurement of pipes | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Monel Seamless Pipes Work Category :

26102000P

Work Category's Description : To supply and deliver monel seamless pipes

Agent Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--|---------------------------------|---|--------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project Manager | Degree in any Engineering field | Minimum 7 years experience in managing procurement of pipes | | | | | | | | | |
| Project Engineer | Degree in any Engineering field | Minimum 5 years experience in managing procurement of pipes | | | | | | | | | |
| Procurement Coordinator / Executive | Degree in any Engineering field | Minimum 3 years experience in procurement of pipes | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Line Pipes Stainless Steel Seamless Pipes Work Category :

26102300P

Work Category's Description To supply and deliver stainless steel seamless pipes

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--|-------------------------------|---|--------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. 100is | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | | |
| Project Manager | field | Minimum 7 years experience in managing procurement of pipes | | | | | | | | | |
| Project Engineer | field | Minimum 5 years experience in managing procurement of pipes | | | | | | | | | |
| Procurement Coordinator / Executive | | Minimum 3 years experience in procurement of pipes | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Offshore - Pipeline Flexible Flowline Work Category :

26111000P

To supply and deliver flexible pipeline/riser/flowline, ancillaries and spare parts, proprietary items, qualified personnels, repair and refurbishment equipment including provision of engineering and repair services Work Category's Description

Mode of Operation Manufacturer

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|---|--|--|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | 3 | 3 | | E.g. CIDB, DOSH | 3 , | | | | | |
| Project Manager / Lead / Senior Engineer | engineering discipline, preferably Riser Engineering / Pipeline Engineering/ Mechanical Engineering/ Marine Engineering/ Structural/Naval Architecture Or | 7 years of experience in supply and design of flexible pipeline/ riser/ flowline | Proper office setup, Manufacturing Plant, Storage and Test Facilities. | | | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Offshore - Pipeline Flexible Flowline Work Category :

26111000P

Work Category's Description

To supply and deliver flexible pipeline/riser/flowline, ancillaries and spare parts, proprietary items, qualified personnels, repair and refurbishment equipment including provision of engineering and repair services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | E.g. warenouse, Dockyaru | E.y. 100IS | | E.g. CIDB, DOSH | E.g. 150, AFI Standard | | | | |
| | | | | | Principal to have minimum of 5 years experience in supply and design of flexible pipeline/ riser/ flowline (Company to provide list of experiences) | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Offshore - Pipeline Riser Work Category : 26111100P

To supply and deliver top tension riser system/hybrid riser system/riser components but not limited to flex joint, stress joint, bouyancy system, connectors, fairings/strake and spare parts, proprietary items, qualified personnels, repair and refurbishment equipment including provision of engineering and repair services Work Category's Description

Manufacturer Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|---|--|--|----------------------|-------------------------------|-----------------------------------|-------------------------|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | 3 , , | 3 | | E.g. CIDB, DOSH | Lig. 100,7tt Totalidard |
| Project Manager / Lead / Senior Engineer | Master in any relevent engineering discipline, preferably Riser Engineering / Pipeline Engineering / Pipeline Engineering / Mechanical Engineering/ Methanical Engineering/ Structural/Naval Architecture Or B.Eng/ Diploma in any relevent engineering discipline, preferably Riser Engineering / Pipeline Engineering / Pipeline Engineering / Mechanical Engineering / Structural/Naval Architecture | riser system and riser of components 7 years of experience in supply and design of top tension riser system, hybrid riser system and riser components | Proper office setup, Manufacturing Plant, Storage and Test Facilities. | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Offshore - Pipeline Riser Work Category : 26111100P

Work Category's Description

To supply and deliver top tension riser system/hybrid riser system/riser components but not limited to flex joint, stress joint, bouyancy system, connectors, fairings/strake and spare parts, proprietary items, qualified personnels, repair and refurbishment equipment including provision of engineering and repair services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|--------------------------|----------------------|--|-----------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, AFT Standard | | | | | |
| | | | | | Principal to have minimum of 5 years experience in supply and design of top tension riser system/ hybrid riser system/ riser components (Company to provide list of experiences) | | | | | | | |

Oil Country Tubular Goods (OCTG) & Line Pipes Oil Country Tubular Goods (OCTG) Pipe Threading Services Work Category :

26121200S

Work Category's Description : The provision of Pipe Threading Facilities and Services

Self-Operated Mode of Operation

| | Minimum Technical Requirement | | | | | | | | | | |
|-------------------|-------------------------------|---|--------------------------|--|----------------------|---------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment / Machineries | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in any engineering | Minimum 5 years experience in oilfield tubular and OCTG | workshop in Malaysia | Complete Set of Torque Machine and Threading Equipment | | | | | | | |
| Well Manager | Degree in any engineering | Minimum 3 years experience in oilfield tubular and OCTG | | | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Offshore Maintenance, Construction & Modification (MCM) Floating Offshore Production Facilities O&M Work Category

27101000S

The provision of manpower, materials, consumables, equipment and facilities for operations and maintenance of floating offshore facilities such as but not limited to FPSO, FSO, TLP, SPAR and Semi-sub Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|-------------------------------|---|-------------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Operations Director/ Manager/ Chief Operating Officer | | 10 year's experience in in floating offshore facilities related works | | | Minimum 3 years experience in Oil and Gas floating offshore facilities related works | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Offshore Maintenance, Construction & Modification (MCM) Floating Offshore Production Facilities O&M Work Category

27101000S

Work Category's Description Services related to operations and maintenance of floating offshore facilities such as but not limited to FPSO, FSO, TLP, SPAR, Semi-sub, etc.

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|--|--|---|---------------------|----------------------|---|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Company/ Principal: Project Manager | Bachelor Degree in Engineering | Min ten (10) years experience in managing similar scope of services | Proper office setup | | Principal to have minimum 10 years experience in Oil and Gas business with minimum of 5 years of proven track record in floating offshore facilities business | | |
| Company/ Principal: Lead Engineers | discipline, preferably Naval Architecture / | 5 years experience in Oil and Gas business with a minimum of 3 years of operation / design / fashication / conversion of Floating Offshore Facilities e.g.: FSO, FPSO, FPS, TLP, Spar, Semisub, etc | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Operations Consultancy Services Flow Assurance Work Category

27121000S

The provision of engineering services in the area of Flow Assurance Analysis during various stages including but not limited to Feasibility Study, Concept Select Study and Front End Engineering Design (FEED) of development project Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------------------|--|---|--|--|----------------------|--|-----------------------------------|--|--|--|--|--|
| Designation | Key Personnel Designation Qualification Experience | | | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Project /Technical Manager | B.Eng /Sc in any engineering discipline | Minimum 15 years experience in engineering with a minimum 8 years experience in flow assurance analysis & 5 years experience in process engineering analysis | Manned and permanent engineering office setup complete with Flow Assurance engineering software & drafting facilities | Company to provide the list of engineering software, e.g. HYSYS, PIPESIM, OLGA *Company to provide list of software(s) and copy of the software license(s). | | Registration with BOE (Form F) | | | | | | |
| Lead / Senior Engineer | B.Eng/ Diploma in any related engineering discipline | Minimum 15 years experience in engineering with a minimum 5 years experience in flow assurance analysis, 3 years experience in process engineering analysis & 2 years experience in pipeline hydraulic analysis | | | | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Upstream Consultancy Services Integrated Operations Consultancy & Services Work Category 27121100S

The provision to conduct engineering study, services, Maintenance of Integrated Operations such as but not limited to SmartCen, Smart Well, Smart Field, Data Historian, Collaboration Centre, Upstream Modeling and Analysis Software, Optimization System, Data Quality Assurance and Information Management Work Category's Description

Agent Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|--|--|-----------------------------------|---|---|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | | Manned and permanent office setup | Hand tools Engineering Configuration software | Principal to have minimum 10 years experience in O&G Integrated Operations Consultancy & Services | | |
| Project /Field Service Engineer | Degree in any Engineering field | Minimum 3 years experience in Integrated Operations and Advanced Computer System selection and servicing, trained and certified from Principal | | | | | |
| Technician | Trained and certified by Principal | Minimum 5 years experience in instrumentation System installation | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services
Upstream Consultancy Services
Integrated Operations Consultancy & Services Work Category 27121100S

The provision to conduct engineering study, services, Maintenance of Integrated Operations (e.g. SmartCen, Smart Well, Smart Field, Data Historian, Collaboration Centre, Upstream Modeling and Analysis Software, Optimization System, Data Quality Assurance, Information Management) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--|---|---|---|---|----------------------|--|-----------------------------------|--|--|--|--|
| Designation | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Designation Project Coordinator | Qualification Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup | Hand tools Engineering & Configuration software | | | | | | | |
| Project /Field Service Engineer | Degree in any Engineering field | Minimum 3 years experience in Integrated Operations and Advanced Computer System selection and servicing, trained and certified | | | | | | | | | |
| Technician | Trained and certified | Minimum 5 years experience in instrumentation System installation | | | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Operations Consultancy Services Plant & Topside 3D Scanning & Modelling Work Category

27121300S

Work Category's Description The provision to provide services, equipment, software and manpower for plant & topside 3D scanning and modeling

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-----------------------------------|---------------|--|-----------------------------------|--|----------------------|-------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Manager | | Minimum 7 years experience in Consultancy | Manned and permanent office setup | 1.Relevant software to required study (e.g. PDMS, Auto- CAD, etc) | | | |
| Engineer | | Minimum 5 years experience in Consultancy | | 2.Laser scanning equipment 3.Photogrammetry equipment | | | |
| Lead surveyor (scanning surveyor) | | Minimum 5 years experience in photogrammetry & laser scanning | | 4.Theodolite | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Pipeline Maintenance Pipeline In-Line Inspection Work Category :

27131300S

Work Category's Description Provision of labor, material, equipment, services and facilities for pipeline in-line inspection

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--------------------------------|---|--|--|--|----------------------|---------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | 0 | External Body | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Manager | Degree in any Engineering discipline | Minimum 7 years experience in Pipeline In- Line Inspection | Manned and permanent office Warehouse | Data Analyst Software, equipments, tools and accessories | | | |
| Sr. Data Analyst | | | Workshop Testing and ILI analysis facilities | | | | |
| Field Engineer / Supervisor | Diploma / certificate in any Engineering discipline | Minimum 3 years experience in Pipeline In- Line Inspection | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Pipeline Maintenance Pipeline In-Line Inspection Work Category :

27131300S

Work Category's Description : Provision of labor, material, equipment, services and facilities for pipeline in-line inspection

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|------------------|------------------------------------|---|--------------------------------------|------------|----------------------|---------------------------------|------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment | Company's Experience | External Body | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Project Manager | Degree in any Engineering field | | Manned and permanent office setup | | | | | | | | | |
| Project Engineer | Degree in any Engineering field | 5 years experience in Pipeline In-Line Inspection | | | | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Pipeline Maintenance
Pipeline Internal Cleaning (Cleaning Pigging) Work Category 27131400S

Provision of labor, material, equipment, services and facilities for pipeline internal cleaning (Cleaning Pigging), such as refurbishment, management of operational activities, etc. Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------|-------------------------------|--|--|------------|----------------------|---------------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | Engineering discipline | Minimum 7 years experience in pipeline internal cleaning | Manned and permanent office Warehouse Workshop | PIGs | | | | | | | |
| Supervisor | | Minimum 3 years experience in pipeline internal cleaning | | | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Pipeline Maintenance Pipeline Internal Cleaning (Cleaning Pigging) Work Category 27131400S

Provision of labor, material, equipment, services and facilities for pipeline internal cleaning (Cleaning Pigging), such as refurbishment, management of operational activities, etc. Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------|---|---|-----------------------------------|------------|----------------------|---------------------------------|------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | Degree in any Engineering discipline | 7 years experience in pipeline internal cleaning | Manned and permanent office setup | | | | | | | | | |
| | | 5 years experience in pipeline internal cleaning | | | | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Pipeline Maintenance Riser Repair & Maintenance Work Category

27131500S

Provision of labor, material, equipment, services and facilities for Riser Repair & Maintenance Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--------------------------------|---------------|--|--|-----------------------|----------------------|-------------------------------|------------------------|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Manager | | | Manned and permanent office setup Warehouse Workshop | NDT equipment & tools | | | |
| Field Engineer / Supervisor | | Minimum 3 years experience in riser repair & maintenance | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Turnaround/Shutdown Services 100k - 350k Manhours Work Category

27151000S

Work Category's Description

The provision of manpower, materials, consumables, equipment and facilities necessary for integrated end-to-end planning and preparation, execution and sub-contractor management for Turnaround / Shutdown between 100k – 350k manhours not limited to mechanical defect works for static equipment, structural and piping.

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------------|---|--|---|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Turnaround Manager | Diploma in any discipline | Tumaround Manager shall have minimum 10 years experience in oil & gas industry in mechanical work and Involved in a minimum of 3 Turnaround works as Tumaround Manager in the past 6 years in oil & gas turnaround. | Proper office Operational workshop Access to fabrication yard | Ownership/Lease of the following equipment: 1. One (1) Bundle Puller (10T - 25T) 2. One (1) Bundle Puller (30T - 45T) 3. Two (2) Hydrojet machine Semiautomatic | Cumulative shutdown/turnaround execution manhours of 150,000 within the last Four (4) years and At least Three (3) Shutdown/Turnaround execution of above 50,000 manhours within the last Ten (10) years | DOSH - "Surat sebagai syarikat pembaikpulih Pengandung/Bejana Tekanan Tak Berapi" | Quality Management System (or ISO 9001) |
| Turnaround Scheduler | Diploma in any discipline | Turnaround Scheduler shall have minimum 6 years experience in oil & gas industry in mechanical maintenance work and Involved in a minimum of 3 Turnaround works as Turnaround Scheduler in the past 6 years in oil & gas turnaround. | | | | | |
| 2 Turnaround Planner | Diploma in any discipline | Tumaround Planner shall have minimum 6 years experience in oil & gas industry in mechanical maintenance work and Involved in a minimum of 3 Turnaround works as Tumaround Planner in the past 6 years in oil & gas turnaround. | | | | | |
| 5 Turnaround Supervisor | SPM or certificate in related field | Minimum 5 years working experience as Turnaround Supervisor in Turnaround maintenance work in oil & gas industry. | | | | | |
| 5 Work Leader | SPM or certificate in related field | Minimum 5 years working experience as Tumaround Work Leader/Foreman in Tumaround maintenance work in oil & gas industry. | | | | | |
| Safety Officer | SPM or certificate in related field and registered DOSH green book | Minimum 5 years working experience as Safety Officer in the oil & gas industry | | | | | |
| 2 QA/QC Supervisor | Diploma / certificate in Mechanical Engineering discipline | QA/QC Supervisors shall have minimum 5 years experience in the oil & gas industry as supervisors in fabrication/repair of pressure vessels and piping and/or in OA/QC in mechanical field. | | | | | |

Work Category : Operations & Maintenance Services and Turnaround & Shutdown Services
Turnaround/Shutdown Services
27151100S Below 100k Manhours

Work Category's Description :

The provision of manpower, materials, consumables, equipment and facilities necessary for integrated end-to-end planning and preparation, execution and sub-contractor management for Turnaround / Shutdown below 100k manhours not limited to mechanical defect works for static equipment, structural and piping.

| | | | | AL REQUIREMENT | | | |
|-------------------------|---|--|--|--|--|--|-----------------------------------|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Turnaround Manager | Diploma in any discipline | | Dockyard Proper office Operational workshop Access to fabrication yard | Ownership/Lease of the following equipment: 1. One (1) Bundle Puller (10T - 25T) 2. One (1) Hydrojet machine Semiautomatic | Minimum of Five (5) years providing Daily Maintenance on Mechanical work in Oil/Gas/Petchem plant within the last Ten (10) years | E.g. CIDB, DOSH | Quality Management System |
| Turnaround Planner | Diploma in any discipline | Shutdown/Turnaround Planner shall have minimum 5 years experience in oil & gas industry in mechanical maintenance work and Involved in a minimum of 2 Shutdown/Turnaround works as Shutdown/Turnaround Planner in the past 6 years in oil & gas turnaround. | | | | | |
| 3 Turnaround Supervisor | SPM or certificate in related field | Minimum 5 years working experience as Shutdown/Turnaround Supervisor in Shutdown/Turnaround maintenance work oil & gas industry. | | | | | |
| 3 Work Leader | SPM or certificate in related field | Minimum 5 years working experience as Shutdown/Turnaround Work Leader/Foreman in Shutdown/Turnaround maintenance work in oil & gas industry. | | | | | |
| Safety Officer | SPM or certificate in related field and registered DOSH green book | Minimum 5 years working experience as Safety Officer in the oil & gas industry | | | | | |
| QA/QC Supervisor | Diploma / certificate in Mechanical Engineering discipline | QA/QC Supervisors shall have minimum 5 years experience in the oil & gas industry as supervisors in fabrication/repair of pressure vessels and piping and/or in QA/QC in mechanical field. | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Turnaround/Shutdown Services More than 350k Manhours Work Category

27151200S

Work Category's Description

The provision of manpower, materials, consumables, equipment and facilities necessary for integrated end-to-end planning and preparation, execution and sub-contractor management for Turnaround / Shutdown more than 350k manhours not limited to mechanical defect works for static equipment, structural and piping.

| | MINIMUM TECHNICAL REQUIREMENT Facilities External Body | | | | | | | | | | | |
|-------------------------|---|--|---|---|--|---|------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, | E.g. Tools | Company's Experience | Registration | E.g. ISO, API Standard | | | | | |
| 2 Turnaround Manager | Degree in Engineering | Turnaround Manager | Dockyard 1. Proper office | Ownership/Lease of the | Cumulative (inclusive of | E.g. CIDB, DOSH DOSH - "Surat sebagai | Quality Management | | | | | |
| 2 rumaiound manager | Degree in Engineering | shall have minimum 10 years experience in oil & gas industry in mechanical work | Operational workshop Access to fabrication yard Training center for operational excellence, with CIDB and DOSH certified module (or any | following equipment: 1. Two (2) Bundle Puller (10T - 25T) 2. Two (2) Bundle Puller (30T - 45T) 3. Three (3) Hydrojet | Shareholder's experience) of turnaround execution manhours of 450,000 within the last Five (5) years | syarikat pembaikpulih Pengandung/Bejana Tekanan Tak Berapi" | System (or ISO 9001) | | | | | |
| | | Involved in a minimum of 3 Turnaround works as Turnaround Manager in the past 6 years in oil & gas turnaround. | equivalent certification) for development of fitters, supervisor and work leader | machine Semiautomatic | and At least Three (3) Turnaround execution of above 300,000 manhours | | | | | | | |
| 2 Turnaround Scheduler | Diploma in any discipline | Turnaround Scheduler shall have minimum 8 years experience oil & gas industry in mechanical maintenance work and Involved in a minimum of 3 Turnaround works as Turnaround Scheduler in the past 6 years oil & gas turnaround. | | | within the last Ten (10) years | | | | | | | |
| 4 Turnaround Planner | Diploma in any discipline | Turnaround Planner shall have minimum 8 years experience in oil & gas industry in mechanical maintenance work and Involved in a minimum of 3 Turnaround works as Turnaround Planner in the past 6 years in oil & gas turnaround. | | | | | | | | | | |
| 8 Turnaround Supervisor | SPM (or equivalent) or certificate in related field | Minimum 5 years working experience as Turnaround Supervisor in Turnaround maintenance work in oil & gas industry. | | | | | | | | | | |
| 8 Work Leader | SPM (or equivalent) or certificate in related field | Minimum 5 years working experience as Tumaround Work Leader/Foreman in Tumaround maintenance work in oil & gas industry. | | | | | | | | | | |
| 2 Safety Officer | Diploma (or equivalent) or certificate in related field and registered DOSH green book (or | Minimum 5 years working experience as Safety Officer in the oil & gas industry | | | | | | | | | | |
| 4 QA/QC Supervisor | Diploma / certificate in Mechanical Engineering discipline | QA/QC Supervisors shall have minimum 5 years experience in the oil & gas industry as supervisors in fabrication/repair of pressure vessels and piping and/or in QA/QC in mechanical field. | | | | | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Offshore Maintenance, Construction & Modification (MCM) Living Quarters Work Category

27101100S

Work Category's Description The provision of manpower, materials, consumables, equipment and facilities necessary for repair and maintenance of living quarters

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------|-----------|----------------------|---|-----------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | CIDB | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Offshore Maintenance, Construction & Modification (MCM) Maintenance & Repairs of Offshore Facilities Work Category

27101200S

The provision of labour, materials, consumables, equipments and facilities necessary for maintenance and repair of offshore facilities (topside, jacket and pipeline) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------|-----------|----------------------|---|-----------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | CIDB M | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Offshore Maintenance, Construction & Modification (MCM) Topside Piping & Structural Work Category

27101300S

Work Category's Description

The provision of manpower, materials, consumables, equipment and facilities necessary for repair and maintenance of topside facilities (piping and structural)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| CIDB | | | | | | | | | | | | |

Work Category : Operations & Maintenance Services and Turnaround & Shutdown Services
Offshore Maintenance, Construction & Modification (MCM)
Minor Onshore Fabrication

Work Category's Description : The provision of manpower, services, equipment, materials and facilities for minor onshore fabrication works for civil/ mechanical/electrical & instrumentation/ structural onshore fabrication works including but not limited to structure, grating works and equipment installation & associated structural works

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------|-----------------------------|----------------------|-------------------------------|--|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | zampani, z zapononoc | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | CIDB related category (i.e. CE21; Grade G3, M, or E) | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Service Station Maintenance & Upgrading Works Work Category 27140000S

The provision of manpower, materials, equipment, services, project management and facilities for maintenance and upgrading of service station including civil, mechanical & electrical works Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|----------------------|---|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | 1. CIDB B02 or B04; Grade G3 & above 2. CIDB M12; Grade G3 & above | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Underwater Services Underwater Engineering, Construction & Maintenance Services Work Category

27161300S

The provision of manpower, materials, equipment, services and facilities for Underwater Engineering, Construction & Maintenance Services Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | CIDB - category CE | | | | | | |

Operations & Maintenance Services and Turnaround & Shutdown Services Underwater Services Underwater Engineering, Construction & Maintenance Services Work Category

27161300S

The provision of manpower, materials, equipment, services and facilities for Underwater Engineering, Construction & Maintenance Services Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|----------------------|-------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | | CIDB - category CE | | | | | | |

Process Piping Equipment & Services Actuator Valves Actuated On/Off Valves Work Category

28101000P

To design, engineer, supply, deliver, install, hook up, integrate, test and commission of complete assembly of Actuated On/Off Valves Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Actuated On/Off Valves related works | | | | | | | |

Work Category Process Piping Equipment & Services Actuator Valves Control Valves

28101100P

Work Category's Description To design, engineer, assemble, supply, deliver, install, hook up, test, commission and training of Control Valves

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Control Valves related works | | | | | | |

Work Category Process Piping Equipment & Services Actuator Valves Hydraulic Type :

28101200P

Work Category's Description To design, engineer, assemble, supply, deliver, install, hook up and test Hydraulic Type Actuator

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Sompany S Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in 0&G Hydraulic Actuators related works | | | | | | |

Process Piping Equipment & Services Actuator Valves Instrument Valves & Manifolds Work Category

28101300P

To design, engineer, assemble, supply, deliver, install, hook up and tes Instrument Valves and Manifolds Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|--|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company o Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Instrument Valves and Manifolds related works | | | | | | |

 Work Category
 :
 Process Piping Equipment & Services

 Actuator Valves
 28101500P
 MOV

Work Category's Description : To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Electric Actuator of an MOV system with its control system

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-----------------------------------|---|--|-----------------------------------|---|---|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Engineer / Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | Manned and permanent office setup | Special tools required for MOVs e.g. Hand programming tool Multi Tester Relevant Software & PC/laptop for communication check | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 3 years experience in MOV and its control system, trained and certified from Principal | | | | | |
| Technician / Electrician | Certificate in Electrical field | Minimum 5 years experience in MOV and its control system | | | | | |

Process Piping Equipment & Services Actuator Valves MOV Work Category

28101500P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Electric Actuator of an MOV system with its control system

Mode of Operation Assembler

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|------------------------|---|---|--|---|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 711 Totallaura |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience MOV and its control system production | Manned and permanent office setup Assembling facility Testing facility | Special tools required for MOVs e.g. Hand programming tool Multi Tester Relevant Software & | | Business License from Local Authority | |
| | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | | 3. Relevant Software & PC/laptop for communication check | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 5 years experience in MOV and its control system installation, commission and troubleshoot. Trained and certified by Principal | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 3 years experience MOV and its control system design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Process Piping Equipment & Services Actuator Valves MOV Work Category

28101500P

Work Category's Description

To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Electric Actuator of an MOV system with its control system

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------|--|---|------------------------------------|---|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | | | . | |
| Production Manager | Degree in any Engineering field | Minimum 5 years experience MOV and its control system production | Testing facility | for MOVs e.g. Hand programming tool 2. Multi Tester | | Business License from Local Authority | |
| Project Coordinator | Degree in any Engineering field Or | Minimum 3 years experience in project management | 4. R&D facility | Relevant Software & PC/laptop for communication check | | | |
| | Diploma in any Engineering field | Or Minimum 5 years experience in project management | | | | | |
| Field Service Engineer | Degree in Electrical Engineering | Minimum 10 years experience in MOV and its control system installation, commission and troubleshoot | | | | | |
| Design Engineer | Degree in Electrical Engineering | Minimum 5 years experience in MOV and its control system transformer design | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 3 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |
| R&D Engineer | Degree in Electrical Engineering | Minimum 5 years experience in MOV and its control system design | | | | | |

Process Piping Equipment & Services Actuator Valves Pneumatic Type Actuator Valves Work Category :

28101600P

Work Category's Description To design, engineer, assemble, supply, deliver, install, hook up and test Pneumatic Type Actuator Valves

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Pneumatic Actuators related works | | | | | | |

Process Piping Equipment & Services Actuator Valves Solenoid Work Category

28101700P

Work Category's Description To design, assemble, supply, deliver, install, hook up, test, commission and personnel training of Electric Actuator of Solenoid system

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|------------|----------|----------------------|--|-----------------------------------|--------------------------|--|--|--|--|--|
| Key Personnel | | | | Company's Experience | | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 711 Totalladia | | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Electric Actuators related works | | | | | | | |

Process Piping Equipment & Services Actuator Valves Solenoid Valves Work Category

28101800P

Work Category's Description To design, engineer, assemble, supply, deliver, install, hook up, test, commission of Solenoid Valves

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------|-----------|----------------------|---|-----------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | zzmpzmy z Exponence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Solenoid Valves related works | | | | | | |

Process Piping Equipment & Services Actuator Valves Thermostatic Valves Work Category :

28101900P

Work Category's Description To design, engineer, assemble, supply, deliver, install, hook up, test, commission of Thermostatic Valves

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-------------------------------|------------|---|-------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in O&G Thermostatic Valves related works | | | | | | |

Process Piping Equipment & Services Actuator Valves Valve Accessories & Ancillaries Work Category 28102000P

To design, engineer, assemble, supply, deliver, install, hook up, test and commission of Valve Accessories & Ancillaries such as but not limited to Valve Positioners, Process Regulators, other Valve Accessories & Ancillaries (i.e. regulator, lock up valve, switching valve). Work Category's Description

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|-------------------------------|-----------------|----------------------|--|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | | | Principal to have minimum 10 years experience in valve related works in oil and gas industry (e.g. Valve Positioners, Process Regulators/Self Regulating Valve, Valve Accessories and Ancillaries, etc.) | | |

Process Piping Equipment & Services Actuator Valves Maintenance Instrumentation Valve Work Category 28111100S

Work Category's Description

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, overhaul, refurbish, maintenance, testing and commissioning of Instrumentation Valve such as but not limited to Pneumatic Actuated Valve, Hydraulic Actuated Valve, Solenoid Operated Valve (SOV) and Regulator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|-------------------|--|-------------------------------|------------------|--|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Engineering field | Minimum 3 years experience in valve sizing, selection and servicing , trained and certified from Principal | office setup 2.Workshop | 3.Test Equipment | Principal to have minimum 10 years experience in O&G valve related works | | |
| Technician | | Minimum 5 years experience in valve servicing | | | | | |

Process Piping Equipment & Services Actuator Valves Maintenance Instrumentation Valve Work Category 28111100S

Work Category's Description

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, overhaul, refurbish, maintenance, testing and commissioning of Instrumentation Valve such as but not limited to Pneumatic Actuated Valve, Hydraulic Actuated Valve, Solenoid Operated Valve (SOV) and Regulator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|------------------------------------|---|----------------------------|---|---|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in any Engineering field | Minimum 3 years experience in valve sizing, selection and servicing | office setup 2.Workshop | 1.Hand tools 2.Calibrators 3.Test Equipment 4.Machining Equipment 5.Software/Tools for diagnostic | | | |
| Technician | N/A | Minimum 5 years experience in valve servicing | | | | | |

Work Category Process Piping Equipment & Services Actuator Valves Maintenance Special Application Valve 28111200S

The provision of labour, materials, consumables, equipment and facilitiesnecessary for cleaning, repair, overhaul, refurbish, maintenance, testing and commissioning of Special Application Valve such as Cryogenic valve, Severe Service valve, Special design Valve, Oxygen Service valve Work Category's DeSIription

Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|-------------------|--|-----------------------------|--|--|-----------------|------------------------|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Engineering field | Minimum 3 years experience in valve sizing, selection and servicing , trained and certified from Principal | 2.Workshop | 2.Calibrators 3.Test Equipment 4.Machining Equipment 5.Software /Tools for | Principal to have minimum 10 years experience in O&G valve related works | | |
| | | Minimum 5 years experience in valve servicing | | diagnostic | | | |

Process Piping Equipment & Services Actuator Valves Maintenance Special Application Valve Work Category 28111200S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, overhaul, refurbish, maintenance, testing and commissioning of Special Application Valve such as Cryogenic valve, Severe Service valve, Special design Valve, Oxygen Service valve Work Category's DeSIription

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|---|-------------------------------------|--|---------------------------------|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | Engineering field | Minimum 3 years experience in valve sizing, selection and servicing | | Hand tools Calibrators Test Equipment | | | | | | | |
| Technician | | Minimum 5 years experience in valve servicing | | 4.Machining Equipment 5.Software /Tools for diagnostic | | | | | | | |

Process Piping Equipment & Services Actuator Valves Maintenance Thermostatic Valve Work Category

28111300S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, overhaul, refurbish, maintenance, testing and commissioning of Thermostatic Valves Work Category's DeSIription

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------------------|-------------------------------|---|--|---------------|--|---------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Project /Field Service Engineer | Engineering field | Minimum 3 years experience in valve sizing, selection and servicing, trained and certified from Principal | Manned and permanent office setup Workshop | 2.Calibrators | Principal to have minimum 10 years experience in O&G valve related works | | | | | | |
| Technician | Principal | Minimum 5 years experience in valve servicing | | diagnostic | | | | | | | |

Process Piping Equipment & Services Actuator Valves Maintenance Thermostatic Valve Work Category :

28111300S

The provision of labour, materials, consumables, equipment and facilities necessary for cleaning, repair, overhaul, refurbish, maintenance, testing and commissioning of Thermostatic Valves Work Category's DeSIription :

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------------|--|---|-------------------------------|-----------------|----------------------|-------------------------------|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project /Field Service Engineer | Degree in any Engineering field | Minimum 5 years experience in valve sizing, selection and servicing | 2.Workshop 3.Warehouse | 2.Calibrators | | | |
| Technician | Certificate in relevant Engineering field | Minimum 7 years experience in valve servicing | | | | | |
| QA/QC Engineer | Degree in any Engineering field | Minimum 5 years experience doing QA/QC and Factory Acceptance Test (FAT) | | | | | |

Process Piping Equipment & Services Insulation Services Work Category 28120000S

Work Category's DeSIription The provision of insulation work for Hot Insulation, Acoustic Insulation, Cold Insulation and Personnel Protection Insulation.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|---|--|--|--|-------------------------------|-----------------|------------------------|--|--|--|
| Key Personnel | | Facilities | Equipment | Commenda Francisco | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | Diploma in Engineering or relevant field Or Certificate in related field | years experience in insulation work Or years experience in insulation work | Manned and permanent office setup Operational Workshop | Personal hand tool Rolling machine | | | | | | |

Process Piping Equipment & Services Mechanical Valves Ball Valves Work Category 28131000P

To supply and deliver Ball Valves less than 50mm (Non-Firesafe & Firesafe/Firetested) and Ball Valve 50mm and larger (Firesafe/Firetested & Offshore Pipeline Valve) Work Category's Description

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------------|-----------|----------------------|--|-----------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | ,, | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | Principal to have minimum 10 years experience in oil and gas Valves related works | | | | | | |

Process Piping Equipment & Services Mechanical Valves Gate Valves Work Category :

28131500P

Work Category's Description To supply and deliver

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|---|-------------------------|----------------------|--|-----------------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | | | | | | | | | |
| | | | | | Principal to have minimum 10 years experience in oil and gas Valves related works | | | | | | |

Process Piping Equipment & Services Mechanical Valves Maintenance Governor Valve Work Category

28141000S

Work Category's Description The provision of labour, materials, consumables, equipments and facilities necessary for repair and maintenance of governor valve

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|---|--|---|-------------------------------|---------|-----------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | Certificate in related field Or SPM or equivalent | 5 years experience in governor valve repair & maintenance Or 8 years experience in governor valve repair & maintenance | Proper office & operational workshopStationary Equipment Repair & Maintenance | Personal Hand Tools | | | | | | | |
| Technician | SPM Or equivalent | 2 years experience in governor valve repair & maintenance | | | | | | | | | |

Work Category : Process Piping Equipment & Services

Mechanical Valves Maintenance

28141200S Mechanical Valve

Work Category's Description : The provision of labour, materials, consumables, equipments and facilities necessary for repair, maintenance, testing and commissioning of mechanical valve

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|--------------------------|--------------------------------------|--|---|--|-------------------------------|-----------------------------------|--------------------------|--|--|--|--|
| | Key Personnel | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al 1 Otalidard | | | | |
| Supervisor/ Team Lead | Certified in related field Or SPM | 5 years experience in valve repair and maintenance Or 8 years experience in valve repair and maintenance | | Valve testing, facilities and equipment | | | | | | | |
| Technician | Secondary education | 2 years experience in valve repair and maintenance | | | | | | | | | |

Process Piping Equipment & Services Mechanical Valves Maintenance Relief Valve Work Category

28141300S

The provision of manpower, materials, consumables, equipment and facilities necessary for repair, maintenance, testing, setting and commissioning of relief valve (including vacuum breaker & rupture disc) Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|--|--|--------------------------------|--|----------------------|-------------------------------|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | L.g. 150, AFI Standard |
| | Diploma in Mechanical Engineering Or Certificate in engineering | 5 years experience in relief valve repair & maintenance 7 years experience in relief valve repair & maintenance | Equipment Repair & Maintenance | Access (own/rent)to lifting equipment Hand & measurement tools In-situ testing equipment (e.g. Test Bench, calibrating gauges, nitrogen cylinder, pressure hoses, portable container and etc.) | | | |
| Technician | SPM Or equivalent | 2 years experience in relief valve repair & maintenance | | and story | | | |

Work Category Process Piping Equipment & Services Pipe Fittings Bolting Materials (exclude OEM)

28151200P

Work Category's Description To manufacture, supply and deliver of Bolting Materials

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|--|--|---|---|-------------------------------|--------------------|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in any Engineering field | Minimum 5 years experience in engineering and production of bolting materials | Manned and permanent office setup 2. Manufacturing facility 3. Testing facility 4. Storage facility | Equipment for manufacturing. Equipment for testing of the gasket, (e.g. to conduct strength test, hardness test, shore test, etc.) | | License from local | Appropriate certifying company ASTM Product Monogram |
| | Degree in any Engineering field | Minimum 5 years experience in QA/QC manufacturing | | | | | |
| | Certified DOSH safety qualification or appropriate HSE certificate. | Minimum 3 years in HSE management in manufacturing | | | | | |

Work Category Process Piping Equipment & Services Pipe Fittings Standard Gaskets

28152200P

Work Category's Description To manufacture, supply and deliver of standard gasket

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|---------------|------------|---------------------------------------|---|-------------------------------|-----------------|---|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | | | Testing facility Storage facility | Equipment for manufacturing. Equipment for testing of the gasket, (e.g. to conduct strength test, hardness test, shore test, etc.) | | authority | 1. ISO 9001 certified company 2. Appropriate certifying company ASME Product Monogram 16.20 and 16.21 |

Work Category Process Piping Equipment & Services Actuator Valves LPG Compact Valve

28101400P

Work Category's Description To supply and deliver LPG Compact Valve

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|------------|-----------------------------|----------------------|-------------------------------|--|------------------------|--|--|--|--|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Expendence | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| | | | | | | As certified by Suruhanjaya Tenaga (as a gas equipment product) and SIRIM | | | | | |

Work Category : Structural Steel & Aluminum 2910000P Structural Aluminum

Work Category's Description : To design, fabricate, supply, deliver and install structural aluminium

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-----------------------------------|---|---|-------------------------------|--|----------------------|-------------------------------|------------------------|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company C Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Project Engineer / Coordinator | Degree in any Engineering field Or Diploma in any Engineering field | Minimum 3 years experience in project management Or Minimum 5 years experience in project management | office setup | *Principal to provide all necessary tools | | | |
| Field Service Engineer | Degree in any Engineering field | Minimum 3 years experience in material / construction related field and trained | | | | | |
| Site supervisor | N/A | Minimum 5 years experience in aluminum construction field | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Artificial Lift Sevices
Electrical Submersible Pump (ESP)

30101010S

Work Category's Description: To supply, deliver, install and maintenance of Electrical Submersible Pump (ESP)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|--------------------------------|-------------------------------|---|-----------------------------------|------------|-----------------------------------|-----------------|-------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Ai i otandard | | | |
| Company/Principal: Engineer | 3 3 | | Manned and permanent office setup | | | | | | | |

Mode of Operation:

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Artificial Lift Sevices
Electrical Submersible Pump (ESP)

30101010S

To supply, deliver, install and maintenance of Electrical Submersible Pump (ESP) Work Category's Description:

Self-operated

MINIMUM TECHNICAL REQUIREMENT External Body Registration E.g. CIDB, DOSH Facilities E.g. Warehouse, Dockyard Quality E.g. ISO, API Standard Key Personnel Equipment E.g. Tools Company's Experience Designation Qualification Experience Degree in Engineering Minimum 3 years experience in drilling and/or completion works Manned and permanent office setup Engineer

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Artificial Lift Sevices
Gas Lift

30101011S

To design, supply, deliver, install and maintenance of Gas Lift system Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|---------------------------------------|-----------------------------------|------------|-----------------------------------|-----------------|-------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | |
| Engineer | | | Manned and permanent office setup | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Artificial Lift Sevices
Other Artificial Lift System & Services

30101012S

Work Category's Description: To design, supply, deliver, install and maintenance of other artificial lift such as but not limited to Progressive Cavity Pump, Rod Pumping Services and Jet Pump

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--|--------------------------------------|----------------------|--|-----------------------------------|-------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | | Company's Experience | | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard | | | |
| Engineer | | Minimum 3 years experience in drilling and/or completion works | Manned and permanent office setup | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Borehole Survey/Gyro Survey Services

30101200S

Work Category's Description: The provision of borehole/gyro survey equipment, qualified personnel and engineering/technical support for onshore and offshore services

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------|---------------|--|--|----------------------------|-------------------------------|-----------------|------------------------|
| Key Personnel | | | Facilities E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager | | Minimum 10 years experience in drilling and/or completion operation | Proper office setup and workshop in Malaysia | Magnetic/GYRO survey tools | | | |
| Survey Engineer | | Minimum 5 years experience in gyro surveying equipment and services | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Cementing Equipment & Services

30101300S

The provision of cementing equipment/accessories, material (class G cement and cement additives), qualified personnel, laboratory facilities, inspection and maintenance for onshore and offshore services Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------------|-------------------------------|--|--|----------------------------------|--|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, Art Standard | | | | |
| Technical Manager | | experience in drilling | Proper office/lab/storage warehouse setup and workshop in Malaysia | Cementing Test Lab Facilities | | | | | | | |
| Drilling/Cementing service Engineer | | Minimum 5 years experience in Cementing Equipment & Services | | | | | | | | | |

Work Category: Wells

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Coiled Tubing Services
Coiled Tubing Completion

30101410S Coiled Tubing Comple

Work Category's Description: The provision of Coiled Tubing Completion Services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------|-------------------------------|---|---|---|---|-----------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in Engineering | Minimum 8 years experience in drilling, completion or Coiled Tubing Operations | Workshop and storage facilities | Principal to have complete equipment set for CTC related System | Principal to have minimum 5 years experience in coiled tubing services | | | | | | |
| Service Engineer | Degree in Engineering | Minimum 5 years experience in well completion equipment and services | | | | | | | | | |

Work Category: Wells

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Coiled Tubing Services
Coiled Tubing Completion

30101410S Coiled Tubing Comple

Work Category's Description: The provision of Coiled Tubing Completion Services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------|-------------------------------|---|---|----------------------|---|-----------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 10015 | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in Engineering | Minimum 8 years experience in drilling, completion or Coiled Tubing Operations | Workshop and storage facilities | r e | Owner/company to have minimum 5 years experiences in completion or coiled tubing operations | | | | | | |
| Service Engineer | Degree in Engineering | Minimum 5 years experience in well completion equipment and services | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Coiled Tubing Services
Coiled Tubing Unit & Services

30101411S

The provision of Coiled Tubing Unit (CTU) and qualified personnel/crew for onshore and offshore services Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------------------|-------------------------------|---|--------------------------|------------|--|-----------------|---------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 100is | | E.g. CIDB, DOSH | Ligi. 100, 7th Totalidard | | | |
| Company/Principal: Manager | Degree | 10 years in oil and gas | Office setup in Malaysia | | Principal to have minimum 10 years experience in drilling and well services | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Coiled Tubing Services
Coiled Tubing Unit & Services

30101411S

The provision of Coiled Tubing Unit (CTU) and qualified personnel/crew for onshore and offshore services Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|-------------------------------|--|--|--------------------------|----------------------|-----------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | | Company's Experience | | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, AFI Standard | | | | |
| Operation/ Rig Manager | Diploma | 10 years in drilling and workover operation | Office setup in Malaysia and workshop/warehouse | Coiled Tubing Unit (CTU) | | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Coring Equipment & Services

30101600S

Work Category's Description: The provision of coring equipment, qualified personnel and maintenance for onshore and offshore services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------|-------------------------------|--|--|---|----------------------|-------------------------------|-----------------------------------|--|--|--|--|
| | Key Personnel | | | Facilities E.g. Warehouse, Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | |
| Technical Manager | | Minimum 10 years experience in drilling and/or completion operation | Proper office setup and workshop in Malaysia | Core handling and preservations equipment | | | | | | | |
| Coring Engineer | | Minimum 5 years experience in coring equipment and services | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Directional Drilling, Measurement While Drilling & Logging While Drilling 30101700S

The provision of directional drilling, gyro while drilling, measurement while drilling (MWD) and logging while drilling (LWD) equipment/tools, personnel, directional planning/engineering and maintenance Work Category's Description:

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------------------|-----------------------|--|---|---|--|---|--------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 7ti 1 Otandara |
| Technical Manager | Degree in Engineering | experience in directional | Proper office setup, calibration lab and workshop in Malaysia | Directional drilling/LWD /MWD tools and equipment | | License for radioactive source from Lembaga Tenaga Atom | |
| Directional drilling engineer | Degree in Engineering | Minimum 5 years experience in directional drilling | | | | | |
| LWD/ MWD engineer | Degree in Engineering | Minimum 3 years experience in LWD/MWD. | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Drilling Equipment Rental & Services

30101900S

Work Category's Description: The provision of Drilling Equipment Rental and Services such as but not limited to drill pipe, associated crossover, pup joints and personnel

Mode of Operation: Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|---------------------------------------|-----------------------------------|----------------------|---|-----------------------------------|--------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, E.g. Tools | | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | Ligi 100, 7th Totalidard | | | |
| | | | Manned and permanent office setup | | Principal to have minimum 10 years experience in drilling equipment and services | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Drilling Equipment Rental & Services

30101900S

Work Category's Description: The provision of Drilling Equipment Rental and Services (e.g. drill pipe, associated crossover, pup joints, personnel, etc.)

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------|-------------------------------|-------------------------|------------------------|--|-----------------------------------|-----------------|--------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | Lig. 100, 7.1 Totalidard | | | | |
| | | | office setup, workshop | Owned equipment (e.g. Drill pipe, associated crossover, pup joints, etc.) | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Drilling Fishing Services
Oilfield Fishing Equipments & Services

The provision of fishing equipment/tools, qualified personnel, inspection and maintenance for onshore and offshore services

30102010S

Mode of Operation: Self-operated

Work Category's Description:

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------|-------------------------------|--|---|--|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | |
| Technical Manager | | | Proper office setup and workshop in Malaysia | Torque machine, various drilling and tubular fishing tools | | | | | | | |
| Service Engineer | | Minimum 5 years experience in oilfield fishing equipment and services | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Drilling/Completion Fluids Services

30102100S

Work Category's Description The provision of mud engineering, materials (mud chemical and additives) and laboratory facilities for onshore and offshore services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---------------------------------------|-------------------------------|--|---|------------------------------------|-------------------------------|-----------------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, AFT Standard | | | | |
| Technical Manager | | Minimum 10 years experience in drilling and/or completion operation | Proper office/lab/ storage warehouse setup and workshop in Malaysia | Fully equipment Mud Lab facilities | | | | | | | |
| Drilling/completion fluid Engineer | | Minimum 5 years experience in drilling completion fluid | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Drilling/Completion Fluids Services
Drilling/Completion Fluid Filtration Equipment & Services

30102110S

Work Category's Description The provision of completion fluid filtration equipment and consumables, qualified personnel and equipment maintenance for onshore and offshore services

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-----------------------|-------------------------------|---|---|----------------------------|-------------------------------|-----------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Technical Manager | | experience in drilling | Proper office/ storage warehouse setup and workshop in Malaysia | Fluid Filtration Equipment | | | | | | | |
| Filtration technician | | Minimum 3 years experience in filtration | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Electric Wireline Logging
Cased Hole Electric Logging & Services

30102210S

Work Category's Description The provision of qualified personnel, equipment and services for rig assisted and/or non-rig assisted cased hole electric logging

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|--|---|---|--|----------------------|---|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree in Engineering or Geoscience | Minimum 5 years experience in drilling and/or completion operation And/or Minimum 3 years in cased Hole Electrical Logging | Proper office, lab, warehouse setup in Malaysia | Complete set of Cased Hole Electric logging tools | | I.License for radioactive source from Lembaga Tenaga Atom 1. License for explosives from Polis Diraja Malaysia issued to the company applying for the license; OR 2. License for explosives | |
| | Degree in Engineering or Geoscience | Minimum 5 years experience in e-line operation | | | | Trom Polis Diraja Malaysia issued to a third party AND letter from the third party confirming that license applicant has access to facility | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Electric Wireline Logging
Open Hole Electric Logging & Services

30102211S

Work Category's Description The provision of qualified personnel, equipment and services for rig assisted open-hole electric logging.

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------|--|---|---|---|-------------------------------|--|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Technical Manager | Degree in Engineering or Geoscience | Minimum 10 years experience in drilling and/or completion operation and/or 5 years experience in E-line | Proper office, lab, warehouse setup in Malaysia | Complete set of open- hole electric logging tools. | | I. License for radioactive source from Lembaga Tenaga Atom 1. License for explosives from Polis Diraja Malaysia issued to the company applying for the license; OR 2. License for explosives from Polis Diraja Malaysia | | | | | | |
| E-line engineer | Degree in Engineering or Geoscience | Minimum 5 years experience in e-line operation | | | | issued to a third party AND letter from the third party confirming that license applicant has access to facility | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Liner Hanger Equiment & Services

30102500S

Work Category's Description The provision to supply, deliver, assemble, install, test and maintain liner hanger equipment and accessories

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------|---------------|--|---|----------------------|----------------------|---------------------------------|------------------------|
| Key Personnel | | Facilities | Equipment | Company's Experience | External Body | Quality | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company a Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager | | and/or completion | Office setup in Malaysia 2.Workshop facilities for storage, assembly and maintenance | Torque Machine | | | |
| Service Engineer | | Minimum 5 years experience in Liner Hanger | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Liquid Mud Plant
Floating Liquid Mud Plant /Barge (FLMP)

30102610S

The provision of Floating Liquid Mud Plant /Barge (FLMP) including personnel to provide liquid storage and facilities offshore for drilling operation (It may be equipped with mixing facilities) Work Category's Description

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---|-------------------------------|--|---|--|----------------------|---|-----------------------------------|--|--|--|--|
| Key Personnel Designation Qualification Experience | | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| | | | Manned Ship Management office setup | One valid exclusive appointment letter from Principal for one year 2.List of vessel | | Principal must provide follow documents: 1.Certificate Registry of Vessel 2.Vessel / barge specification | | | | | |

Mode of Operation

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Liquid Mud Plant
Floating Liquid Mud Plant /Barge (FLMP)

30102610S

The provision of Floating Liquid Mud Plant /Barge (FLMP) including personnel to provide liquid storage and facilities offshore for drilling operation (It may be equipped with mixing facilities) Work Category's Description

Vessel Operator

MINIMUM TECHNICAL REQUIREMENT Facilities E.g. Warehouse, Dockyard External Body Registration E.g. CIDB, DOSH Key Personnel Equipment E.g. Tools Quality E.g. ISO, API Standard Company's Experience Designation Qualification Experience Letter of appointment from Owner to operator for each vessel to operat 2.List of vessel Vessel Operator must provide follow documents: Manned Ship Management office setup Certificate Registry of Vessel
 Vessel / barge specification

Mode of Operation

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Liquid Mud Plant
Floating Liquid Mud Plant /Barge (FLMP)

30102610S

The provision of Floating Liquid Mud Plant /Barge (FLMP) including personnel to provide liquid storage and facilities offshore for drilling operation (It may be equipped with mixing facilities) Work Category's Description

Vessel Owner Operator

| MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|-------------------------------|---------------|-------------------------------|--|----------------------|--|---|--------------------------|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | E.g. Warehouse, Equipment | | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | 2.g. 100.0 | | E.g. CIDB, DOSH | Ligi 100, 7ti 1 Otandara | | | | |
| | | | Manned Ship Management office setup | 1.List of own vessel | | Owner must provide follow documents: | | | | | |
| | | | | | | Certificate Registry of Vessel Vessel / barge specification | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Liquid Mud Plant
Onshore Liquid Mud Plant

30102611S

Work Category's Description The provision of Onshore Liquid Mud Plant including personnel to provide liquid storage, mixing and treatment facilities to support drilling operation

Self-operated Mode of Operation

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|------------------------------|---|--|--|--|----------------------|---|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| LMP Operator | Diploma in any discipline/field | 5 years experiences in LMP operation | Liquid storage tanks, mixing and treatment facilities Waste disposal | Storage, mixing and liquid transfer equipment | | DOSH - Surat Kebenaran Operasi DOSH - Surat sebagai syarikat pembuat pengandung/bejana tekanan tak berapi DOSH - Kebenaran | |
| Solid Control Engineer | Degree in any engineering discipline | 3 years experiences in solid control operations | | | | untuk mengendalikan talian paip (Petroleum - Base Oil) 4. DOE - Lesen Perlupusan Buangan Terjadual 5. DOE - Lesen | |
| Waste Management Engineer | Degree in any engineering discipline | 3 years experiences in waste management operations | | | | 5. DUE - Lesen Pemerolehan Kembali Luar Tapak 6. DOE - Kebenaran untuk mengendalikan loji rawatan air (WWTP) | |

Work Category : Wells
Drilling/Completion/Intervention/Workover/Abandonment
30102700S Mud Logging

Work Category's Description : The provision of equipment and services, special services (pressure detection), drill cuttings analysis and drilling parameter (Torque/Drag)

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|----------------------|---------------|---|--|-------------------|----------------------|---------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager | | Minimum 7 years experience in mud logging | Proper office setup and workshop in Malaysia | Mud logging tools | | | |
| Mud logging engineer | | Minimum 5 years experience in mud logging | | | | | |
| HSE Manager | Degree | Minimum 5 years experience in HSE oil and gas | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Sand Exclusion Services
Expandable Sand Screen Equipment & Services

30102810S

Work Category's Description The provision of Expandable Sand Screen Equipment and Services

| | | | Minimum Techn | ical Requirement | | | |
|-----------------------|---------------|--|---|---|----------------------|---------------------------------|------------------------|
| | Key Personnel | | | Equipment / Machineries | Company's Experience | External Bodies Registration | Quality |
| Position Title | Qualification | Experience | Facilities F.g. Warehouse | E.g. Tools | , , , | E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | | experience in drilling | Proper office, lab, warehouse setup in Malaysia | Complete set of Sand Control Equipment | | | |
| Sand Control engineer | | Minimum 7 years experience in sand control operation | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Sand Exclusion Services
Open & Cased Hole Gravel Packing Equipment & Services

30102811S

Work Category's Description The provision of Gravel Packing Equipment & Services

| | | | Minimum Techn | ical Requirement | | | |
|-----------------------|-----------------------|---|---|---|----------------------|---------------------------|------------------------|
| Key Personnel | | | Facilities | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | Degree in Engineering | Minimum 10 years experience in drilling and/or completion operation And/or 5 years Experience in sand control | Proper office, lab, warehouse setup in Malaysia | Complete set of Sand Control Equipment | | | |
| Sand Control engineer | Degree in Engineering | Minimum 7 years experience in sand control operation | | | | | |

Work Category : Wells

Wells
Drilling/Completion/Intervention/Workover/Abandonmen
Sand Exclusion Services
Stand Alone Screen Equipment & Services

30102812S Stand Alone Screen Equ

Work Category's Description : The provision of Standalone Sand Control Screen Equipment and Services

| | | | Minimum Techn | ical Requirement | | | |
|-----------------------|-----------------------|--|---|---|----------------------|---------------------------|------------------------|
| | Key Personnel | | | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | | experience in drilling | Proper office, lab, warehouse setup in Malaysia | Complete set of Sand Control Equipment and pumping unit | | | |
| Sand Control engineer | Degree in Engineering | Minimum 5 years experience in sand control operation | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Slickline Services

30102900S

Work Category's Description The provision of slickline equipment/tools, personnel and engineering/technical support for onshore and offshore services

| | | | Minimum Techn | ical Requirement | | | |
|-------------------|---------------|--|--|---|----------------------|---------------------------|------------------------|
| Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | | experience in O&G and/or | Proper office, gas lift lab, warehouse, workshop setup in Malaysia | Workbench, slickline unit, pressure control equipment | | | |
| · | | Minimum 5 years experience as Slickline operator | | | | | |

Work Category : Wells

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Casing Drilling

Specialized Drilling St 30103010S Casing Drilling

Work Category's Description : The provision of casing drilling equipment and services

| | Minimum Technical Requirement | | | | | | | | | | |
|--------------------------|-------------------------------|---|--|--|----------------------|---------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment / | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Technical Manager | | Minimum 5 years experience in casing drilling | Proper office set up, calibration Lab and workshop in Malaysia | Complete set of Casing drilling Tools/equipment | | | | | | | |
| Casing Drilling Engineer | | Minimum 3 years experience in casing drilling | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Coiled Tubing Drilling (CTD)/Through Tubing Rotary

30103011S

Work Category's Description The provision of skilled personnel and equipment to perform Coiled Tubing Drilling/Through Tubing Rotary Drilling (this scope involves planning and logistics)

Mode of Operation

| | | | Minimum Techni | cal Requirement | | | |
|--|---------------|--|---|---------------------------|--|---------------------------|------------------------|
| | Key Personnel | | | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Company/ Principal: Technical Manager | | Minimum 10 years experience in O&G and/or 5 years experience in drilling | Proper office setup and workshop in Malaysia | | Principal to have minimum 10 years experience in coiled tubing services and/or coilled tubing drilling services | | |

Work Category : Wells

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Colled Tubing Drilling (CTD)/Through Tubing Rotary

30103011S Specialized Drilling
Coiled Tubing Drilli

301030113 Collect Tubing Dinning (CTD)/Through Tubing Kotaly

Work Category's Description : The provision of skilled personnel and equipment to perform Coiled Tubing Drilling/Through Tubing Rotary Drilling (this scope involves planning and logistics)

| | Minimum Technical Requirement | | | | | | | | | | |
|-------------------|-------------------------------|------------|---|---------------------------|----------------------|---------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in Engineering | | Proper office setup, calibration lab and workshop in Malaysia | | | | | | | | |

Work Category : Wells

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Expandable Tubular

30103013S Expandable Tubular

Work Category's Description : To supply, deliver, install and test/commission Expandable Tubular (i.e. Expandable liner)

Mode of Operation : Agent

| | Minimum Technical Requirement | | | | | | | | | | |
|--------------------------------|-------------------------------|---------------------------------------|--|---------------------------|---|---------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment / | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Company/ Principal: Manager | | Minimum 10 years experience in O&G | Proper office setup and workshop in Malaysia | | Principal to have minimum 10 years experience in drilling | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Expandable Tubular

30103013S

Work Category's Description : To supply, deliver, install and test/commission Expandable Tubular (i.e. Expandable liner)

| | Minimum Technical Requirement | | | | | | | | | | | |
|-------------------|-------------------------------|---|--|---------------------------|----------------------|---------------------------|------------------------|--|--|--|--|--|
| | Key Personnel | | | Equipment / | | External Bodies | Quality | | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | | |
| Technical Manager | | | Office setup in Malaysia Workshop facilities for storage, assembly and maintenance | Torque Machine | | | | | | | | |
| Service Engineer | | Minimum 5 years experience in expandable tubular services | | | | | | | | | | |

Wells Drilling/Completion/Intervention/Workover/Abandonment Specialized Drilling Services Smart/Intelligent Well System

30103014S

Work Category's Description To supply, deliver, install, test/commission and maintenance Intelligent/Smart Well System. (Complete with PDG and Flow Control Valve (FCV))

Mode of Operation Agent

| | Minimum Technical Requirement | | | | | | | | | | |
|--------------------------------|-------------------------------|------------------------|--|------------|---|---------------------------|------------------------|--|--|--|--|
| Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Company/ Principal: Manager | | | Office setup in Malaysia Workshop facilities for storage, assembly and maintenance | | Principal to have minimum 10 years experience in completion | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Smart/Intelligent Well System

30103014S

Work Category's Description : To supply, deliver, install, test/commission and maintenance Intelligent/Smart Well System. (Complete with PDG and Flow Control Valve (FCV))

| | | | Minimum Techn | ical Requirement | | | |
|-------------------|---------------------------------|--|---|--|----------------------|---------------------------|--------------------------------|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality E.g. ISO, API Standard |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | |
| Technical Manager | | Minimum 10 years experience in completion operation and/or 5 years experience in Smart / Intelligent Well System | Proper office setup and workshop in Malaysia | Complete Set of Smart / Intelligent Well System | | | |
| Engineer | And/or Degree in Geo Science | Minimum 5 years experience in completion operation and/or 3 years experience in Smart/intelligent Well System. | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Swell/Expandable Packer

30103015S

Work Category's Description To supply, deliver, install and test/commission Swell/Expandable Packer

Mode of Operation Agent

| | Minimum Technical Requirement | | | | | | | | | |
|--------------------------------|-------------------------------|---|--|---------------------------|---|---------------------------|------------------------|--|--|--|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | |
| Company/ Principal: Manager | Degree | Minimum 10 years experience in oil & gas | Office setup in Malaysia 2.Workshop facilities for storage, assembly and maintenance | | Principal to have minimum 10 years experience in drilling | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Swell/Expandable Packer

30103015S

Work Category's Description : To supply, deliver, install and test/commission Swell/Expandable Packer

| | | | Minimum Techn | ical Requirement | | | |
|-------------------|---------------|---|--|------------------|----------------------|---------------------------|------------------------|
| | Key Personnel | | | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | | | Office setup in Malaysia Workshop facilities for storage, assembly and maintenance | Torque Machine | | | |
| Service Engineer | | Minimum 5 years experience in swell / expandable packer services | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Under Balance Drilling (UBD) & Managed Pressure

30103016S

Work Category's Description The provision of Under Balanced Drilling and Managed Pressure Drilling Equipment and Services

| | Minimum Technical Requirement | | | | | | | | | |
|---------------------------------------|-------------------------------|---|---|--|---------------------------|------------------------|---------|--|--|--|
| Key Personnel | | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | | | |
| Position Title | Qualification | Experience | Dockyard E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Technical Manager | | experience in Managed | Proper office setup, calibration lab and workshop in Malaysia | Complete set of Managed Pressure Drilling Tools | | | | | | |
| Managed Pressure Drilling engineer | | Minimum 3 years experience in Managed Pressure Drilling | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Well Bore Cleanup Equipment & Services

30103017S

Work Category's Description The provision of Well Bore Cleanup Equipment and Services including personnel

Mode of Operation Agent

| | | | Minimum Techni | ical Requirement | | | |
|--|---------------|---|------------------------------------|---------------------------|---|---------------------------|------------------------|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Company/ Principal: Technical Manager | | Minimum 7 years experience in drilling AND/OR AND/OR Completion operation AND/OR 3 years experience in Well Bore Cleanup Equipment and Services | Proper office setup in Malaysia | | Principal to have minimum 10 years experience in Well Bore Cleanup Equipment and Services | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Well Bore Cleanup Equipment & Services

30103017S

Work Category's Description : The provision of Well Bore Cleanup Equipment and Services including personnel

| | Minimum Technical Requirement | | | | | | | | | | |
|-------------------|-------------------------------|------------|------------------------------------|---------------------------|----------------------|---------------------------|------------------------|--|--|--|--|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in Engineering | | Proper office setup in Malaysia | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Drilling Services
Well Drilling Monitoring-Real Time Operation

30103018S

Work Category's Description The provision of Well Drilling Monitoring-Real Time Operation including personnel and services

| | | | Minimum Techn | ical Requirement | | | |
|-------------------|--|---|--|------------------------------------|----------------------|---------------------------|------------------------|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | Degree in Engineering | Minimum 10 years experience in drilling and/or completion operation and/or 5 years experience in Well Drilling Monitoring | Proper office setup and operation centre in Malaysia | Relevant ICT Hardware and software | | | |
| RTOC Engineer | Degree in Engineering And/or Degree in Geo Science | Minimum 5 years experience in drilling and/or completion operation and/or 3 years experience in Well Drilling Monitoring. | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Well Services
Downhole Tractoring Services

30103111S

Work Category's Description The provision of downhole tractoring equipment and services

| | Minimum Technical Requirement | | | | | | | | | | |
|-------------------|-------------------------------|---|--|---------------------------|----------------------|---------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment / | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in Engineering | Minimum 5 years experience in drilling/completion services | Proper office setup and workshop in Malaysia | | | | | | | | |
| Service Engineer | Degree in Engineering | Minimum 5 years experience in drilling/completion services | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Well Services
Well Control & Blowout Emergency Response

30103117S

Work Category's Description The provision of well control & blowout emergency response equipment, personnel and services

Mode of Operation Agent

| | | | Minimum Techn | ical Requirement | | | |
|--|---|--|-----------------------------|---|--|---------------------------|------------------------|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| AGENT Technical Manager | Degree in any engineering discipline | 5 years in oil & gas industry | Office setup in Malaysia | Advance well control and kick modeling software (lease/own) Dynamic kill software (lease/own) Well kill equipment (e.g. | 5 years in well controls and emergency response | | |
| PRINCIPAL Senior Well Control Specialist | Degree in any engineering discipline | 10 years in well control prevention and blowout emergency response | | high pressure pumping equipment and snubbing units) | | | |
| Senior Well Control Engineer | Degree in any engineering discipline | 7 years in well control prevention and blowout emergency response | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Well Services
Well Control & Blowout Emergency Response

30103117S

Work Category's Description The provision of well control & blowout emergency response equipment, personnel and services Mode of Operation Self-Operated

| | | | Minimum Techn | ical Requirement | | | |
|-----------------------------------|---|--|-----------------------------|---|--|---------------------------|------------------------|
| | Key Personnel | _ | Facilities in Malaysia | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | Degree in any engineering discipline | 5 years in oil & gas industry | Office setup in Malaysia | Advance well control and kick modeling software (lease/own) Dynamic kill software (lease/own) Well kill equipment (e.g. | 5 years in well controls and emergency response | | |
| Senior Well Control Specialist | Degree in any engineering discipline | 10 years in well control prevention and blowout emergency response | | high pressure pumping equipment and snubbing units) | | | |
| Senior Well Control Engineer | Degree in any engineering discipline | 7 years in well control prevention and blowout emergency response | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Specialized Well Services
Well Stimulation/Enhancement Services

30103119S

Work Category's Description The provision of stimulation equipment and chemicals, qualified personnel and equipment maintenance for onshore and offshore services

| | Minimum Technical Requirement | | | | | | | | | | |
|-------------------|-------------------------------|--|--|--|----------------------|--|------------------------|--|--|--|--|
| | Key Personnel | | Facilities in Malaysia | Equipment / | Company's Experience | External Bodies Registration E.g. CIDB | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | | | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in any engineering | Minimum 5 years experience in well stimulation operation | Proper office setup and workshop in Malaysia | Complete Set of Well Stimulation Equipment and accessories | | | | | | | |
| Well Manager | | Minimum 3 years experience in well stimulation operation | | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Subsea Well Intervention Services

30103200S

Work Category's Description : The provision of manpower, materials, consumables, equipment and tools necessary for subsea well Intervention services

Mode of Operation Agent

| | Minimum Technical Requirement | | | | | | | | | | |
|--|-------------------------------|---|------------------------------------|---------------------------|--|---------------------------|------------------------|--|--|--|--|
| Key Personnel | | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Company/ Principal: Technical Manager | | Minimum 5 years experience in subsea well intervention services | Proper office setup in Malaysia | | Principal to have minimum 10 years experience in Subsea Well Intervention Services | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Subsea Well Intervention Services

30103200S

Work Category's Description The provision of manpower, materials, consumables, equipment and tools necessary for subsea well Intervention services

| | Minimum Technical Requirement | | | | | | | | | | |
|-------------------|-------------------------------|---|------------------------------------|---------------------------|----------------------|---------------------------|------------------------|--|--|--|--|
| | Key Personnel | | | Equipment / | | External Bodies | Quality | | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | | |
| Technical Manager | Degree in Engineering | Minimum 5 years experience in subsea well intervention services | Proper office setup in Malaysia | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Tubular Installation

30103300S

Work Category's Description The provision of tubular running equipment, qualified personnel, maintenance, inspection and torque-turn

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|-------------------|-------------------------------|--|---|---|-------------------------------|-----------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, AFI Standard | | | |
| Technical Manager | | | Proper office setup and workshop in Malaysia | Power tong, Power unit and accessories. | | | | | | |
| Service Engineer | | Minimum 5 years experience in tubular running services | | | | | | | | |

| Work Category | : | | Wells Drilling/Completion/Intervention/Workover/Abandonment |
|-----------------------------|---|-----------|--|
| | | 30103400S | Well Completion Equipment & Services |
| Work Category's Description | : | | mble, install and test completion equipment and accessories such as but not limited to Subsurface Safety Valve, Packer, Nipple, Sliding & Accessories, Seal Assembly, Control Line and Protector and Tubular Accessories |

| | Minimum Technical Requirement | | | | | | | | | |
|-------------------|-------------------------------|---|--|---|----------------------|---------------------------|------------------------|--|--|--|
| | Key Personnel | | Facilities in Malaysia | Equipment / | | External Bodies | Quality | | | |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard | | | |
| Technical Manager | | and/or completion | Workshop facilities for storage, assembly and maintenance Manufacturing facilities | 1.Boring machine 2.Lathe machine 3.Torque machine 4.Pressure test pit | | | | | | |
| Service Engineer | | Minimum 5 years experience in well completion equipment and services | | | | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Well Perforation Services
Coiled Tubing Well Perforating Services

30103610S

The provision of Coiled Tubing Well Perforating , Skilled Personnel and Services

Mode of Operation Self-operated

Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--|-----------------------|------------|--|---|----------------------|---|------------------------|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager Coiled Tubing Well Perforating engineer | Degree in Engineering | | Office setup in Malaysia and warehouse | Coiled Tubing Well Perforating guns and associated accessories. | | License for explosives from Polis Diraja Malaysia issued to the company applying for the license; OR License for explosives from Polis Diraja Malaysia issued to a third party AND letter from the third party confirming that license applicant has access to facility | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Well Perforation Services
Electricline Well Perforating Services

30103611S

The provision of Electricline Well Perforating , Skilled Personnel and Services

Mode of Operation Self-operated

Work Category's Description

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|-----------------------|--|---|--|----------------------|---|------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | | | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager Electricline Well Perforating engineer | Degree in Engineering | Minimum 7 years experience in drilling and/or completion operation and/or 3 years experience in Electricline Well Perforating Minimum 5 years experience in Electricline Well Perforating Well Perforating | Office setup in Malaysia and warehouse | Electricitine Well Perforating guns and associated accessories | | License for explosives from Polis Diraja Malaysia issued to the company applying for the license; OR License for explosives from Polis Diraja Malaysia issued to a third party AND letter from the third party confirming that license applicant has access to facility | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Well Perforation Services
Through Tubing Well Perforation Services

30103613S

Work Category's Description The provision of Through Tubing Well Perforation, Skilled Personnel and Services

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|-----------------------|---|---|--|----------------------|--|------------------------|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Technical Manager | Degree in Engineering | Minimum 7 years experience in drilling and/or completion operation and/or 3 years experience in Through Tubing Well Perforation | Office setup in Malaysia and warehouse | Through Tubing Well Perforation guns and associated accessories. | | License for explosives from Polis Diraja Malaysia issued to the company applying for the license; OR License for explosives from Polis Diraja Malaysia issued to a third party | |
| Through Tubing Well Perforation engineer | | Minimum 5 years experience in Through Tubing Well Perforation | | | | AND letter from the third party confirming that license applicant has access to facility | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Well Perforation Services
Tubing Conveyed Perforation

30103614S

Work Category's Description The provision of Tubing Conveyed Perforating, Skilled Personnel and Services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|---|-------------------------------|------------|---|--|----------------------|---|------------------------|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment | Company's Experience | External Body Registration | Quality | | | | |
| Designation | Qualification | Experience | | E.g. Tools | Company 3 Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Technical Manager Tubing Conveyed Perforation engineer | Degree in Engineering | | Office setup in Malaysia and warehouse | Complete set of Well Test Equipment and accessories TCP guns and associated accessories. | | License for explosives from Polis Diraja Malaysia issued to the company applying for the license; OR License for explosives from Polis Diraja Malaysia issued to a third party AND letter from the third party confirming that license applicant has access to facility | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Well Testing Equipment and Services

30103700S

Work Category's Description The provision of well testing equipment, qualified personnel, equipment maintenance, liquid and gas sampling/analysis for onshore and offshore services

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|--------------------|-----------------------|---|---|---|----------------------|--|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | | | | | |
| Technical Manager | Degree in Engineering | experience in drilling | Proper office, lab, warehouse setup in Malaysia | Complete set of Well Test Equipment and accessories | | | |
| Well Test engineer | | Minimum 5 years experience in well test operation | | | | | |
| HSE Manager | Degree | Minimum 5 years experience in HSE oil and gas. | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Wellhead/Christmas Tree
Subsea Wellhead/Christmas Tree

30103810P

Work Category's Description

To design, manufacture, test, assemble, supply, deliver, install, hookup and commission of Subsea Wellhead and Christmas Tree, Installation & Workover Control System (IWOCS), wellhead equipment, running tools, consumables and spare parts, proprietary items, qualified personnel, repair and refurbishment equipment, conduct training on installation and operation, including provision of engineering and repair services.

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------------------------|---|---|---|---|----------------------|--|---|
| MINIM Designation | MINIMUM TECHNICAL REQUIREMENT Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Project/Technical Manager | Degree/ Diploma in any related engineering discipline | 15 years experience in subsea wellhead related work with a minimum 5 years of experience in Subsea Wellhead Operation/Subsea Engineering | Manufacturing Facilities in Malaysia | Relevant CNC and boring machines, milling equipment | | | American Petroleum Institute (API) 17D monogram |
| Lead/Senior Engineer | Degree/Diploma in any related engineering discipline | 10 years experience in offshore oil and gas design engineering with a minimum 5 years of experience in Subsea Wellhead & Tree and Installation & Workover Control System (IWOCS) design | | | | | |
| Subsea Wellhead Supervisor | Diploma in any related engineering discipline | Minimum 10 years experience in wellhead installation with 5 years in subsea wellhead operation | | | | | |

30103811P

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Wellhead/Christmas Tree
Surface Wellhead/Christmas Tree

Work Category's Description To design, Assemble, Supply, Deliver, Install, Test Surface Wellhead And Conduct Training On Operation

Mode of Operation Manufacturer

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------------|---|---|---|--|----------------------|--|-----------------------------------|
| Designation | Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard |
| Technical Manager | Degree in Engineering | Minimum 10 years | Manufacturing Facilities in Malaysia | Relevant CNC and boring machines, milling equipments | | | API 6A monogram |
| Wellhead Supervisor | Diploma in Engineering | Minimum 10 years experience in wellhead and christmas tree installation with 5 years in surface wellhead operation | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Wellhead/Christmas Tree Services
Subsea Production System Maintenance & Repair Services

30103910S

Work Category's Description The provision of manpower,tooling, spares, refurbishment, equipment, project management and engineering in Subsea Equipment Maintenance and Repair Services such as but not limited to Subsea Christmas tree, control system, distribution system, hardware, structure and tooling

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|-------------|------------------------|--|---|---|----------------------|---------------------------------|------------------------|
| | Key Personnel | | Facilities | Equipment | | External Body | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | engineering discipline | Minimum 10 years experience in subsea equipment maintenance and repair. | Comprehensive office setup , storage/test facilities. | Subsea equipment service and test facilities. | | | |
| | engineering discipline | Minimum 5 years experience in subsea equipment maintenance and repair. | | | | | |
| | | Minimum 5 years experience in HSE oil and gas. | | | | | |

Wells
Drilling/Completion/Intervention/Workover/Abandonment
Wellhead/Christmas Tree Services
Subsea Wellhead/Christmas Tree Maintenance & Services

30103911S

Work Category's Description The provision of manpower, materials, consumables, equipment and tools necessary for inspection, maintenance, repair and troubleshooting of subsea wellhead

| | | | Minimum Techn | ical Requirement | | | |
|---|---------------|---|--|---|----------------------|---------------------------|------------------------|
| Key Personnel | | | Facilities in Malaysia | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | | experience in wellhead | Proper office, warehouse, workshop setup in Malaysia | Wellhead service and maintenance equipment | | | |
| Surface wellhead maintenance Supervisor | | Minimum 5 years experience in installation and maintenance of wellhead and Christmas tree | | | | | |

Work Category : Wells
Drilling/Completion/Intervention/Workover/Abandonment
Wellhead/Christmas Tree Services
30103912S Surface Wellhead/Christmas Tree Maintenance & Services

Work Category's Description : The provision of manpower, materials, consumables, equipment and tools necessary for inspection, maintenance, repair and troubleshooting of surface wellhead

| | | | Minimum Techni | ical Requirement | | | |
|---|---------------|---|--|---|----------------------|---------------------------|------------------------|
| | Key Personnel | | | Equipment / | | External Bodies | Quality |
| Position Title | Qualification | Experience | E.g. Warehouse, Dockyard | Machineries E.g. Tools | Company's Experience | Registration E.g. CIDB | E.g. ISO, API Standard |
| Technical Manager | | experience in wellhead | Proper office, warehouse, workshop setup in Malaysia | Wellhead service and maintenance equipment | | | |
| Surface wellhead maintenance Supervisor | | Minimum 5 years experience in installation and maintenance of wellhead and Christmas tree | | | | | |

Wells Rigs Services Dedicated Workover Services Conventional Workover Rig 30111010S

Work Category's Description The provision of Conventional Workover Rig (CWR) and qualified personnel/crew for onshore and offshore services

Mode of Operation Agent

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|------------------------|--------------------------------|-------------------------------|-------------------------|---|-------------------------------|------------------------|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | Principal to have minimum 5 years experience in drilling, | | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas. | | | | | |

Wells Rigs Services Dedicated Workover Services Conventional Workover Rig 30111010S

Work Category's Description : The provision of Conventional Workover Rig (CWR) and qualified personnel/crew for onshore and offshore services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|-------------------------------|---|-----------------------------|------------------------------------|----------------------|---------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities | | | External Body | | | | | |
| | | | E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | | | | | | | | | |
| Operation/ Rig Manager | Diploma | 10 years in drilling and workover operation | Office setup in Malaysia | Conventional Workover Rig (CWR) | | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | |

Wells Rigs Services Dedicated Workover Services Hydraulic Workover Unit (HWU)/Workover Pulling Unit 30111011S

Work Category's Description The provision of Hydraulic Workover Unit (HWU)/Workover Pulling Unit (WPU) and qualified personnel/crew for onshore and offshore services

Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|------------------------|--------------------------------|--------------------------------------|----------------------|---|-----------------------------------|------------------------|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | Principal to have minimum 5 years experience in drilling, | | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas. | | | | | |

Wells
Rigs Services
Dedicated Workover Services
Hydraulic Workover Unit (HWU)/Workover Pulling Unit 30111011S

The provision of Hydraulic Workover Unit (HWU)/Workover Pulling Unit (WPU) and qualified personnel/crew for onshore and offshore services Work Category's Description :

Mode of Operation Rig operator

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---------------|---------------|---|---|----------------------|--|-----------------------------------|------------------------|
| Key Personnel | | | Facilities Equipment E.g. Warehouse, E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | E.g. 150, AFI Standard |
| | | 10 years in drilling and workover operation | Office setup in Malaysia | | Principal to have minimum 10 years experience in drilling/ workover. | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | | |

Wells
Rigs Services
Dedicated Workover Services
Hydraulic Workover Unit (HWU)/Workover Pulling Unit 30111011S

Work Category's Description The provision of Hydraulic Workover Unit (HWU)/Workover Pulling Unit (WPU) and qualified personnel/crew for onshore and offshore services

Mode of Operation Rig owner operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|-------------------------------------|--------------------------------|--|---|---|----------------------|--|-----------------------------------|--|--|--|--|
| Designation | Key Personnel Qualification | Experience | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | |
| Operation/ Rig Manager HSE Manager | Diploma in engineering Degree | 10 years in orilling and workover operation 5 years in oil and gas with experience in offshore and offshore operation | Office setup in Malaysia | "Set of Hydraulic Workover Unit (HWU) / Workover Pulling Unit (WPU) ready for the workover operation"). The unit shall convertible from HWU traditional workover mode to life well snubbing operation mode (well under pressure). "Comprise of but not limited to perform workover operation - Hydraulic/Jacking system - Hydraulic/Jacking system - Hydraulic/Jacking system BOP "Company to provide document of purchase, statement of delivery date and equipment storage location in Malaysia | | E.g. CIDB, DOSH Rig Owner Operator must provide the following documents: 1. Rig Certificate of Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities Agreement from Local Bank 4. Official Letter from the Company showing the breakdown of the rig ownership in percentage (%) | | | | | |
| | | | | | | | | | | | |

30111012S

Wells Rigs Services Dedicated Workover Services Snubbing Unit & Services Work Category's Description The provision of Snubbing unit and qualified personnel/crew for onshore and offshore services

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|-------------------------------|--------------------------------|--------------------------|----------------------|---|-----------------|------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | Principal to have minimum 5 years experience in drilling, | | | | | | | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | | |

Wells Rigs Services Dedicated Workover Services Snubbing Unit & Services 30111012S

Work Category's Description : The provision of Snubbing unit and qualified personnel/crew for onshore and offshore services

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|-------------------------------|---|-------------------------------|--------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. Tools | | E.g. CIDB, DOSH | L.g. 130, AFI Standard | | | | |
| Operation/ Rig Manager | Diploma | 10 years in drilling and workover operation | Office setup in Malaysia | Snubbing Unit & Services | | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | |

Work Category : Wells
Rigs Service

Wells
Rigs Services
Drilling Rigs
30111110S
Offshore - Drill Ship

Work Category's Description :

The provision of drill ship including manpower, equipment, ROV, consumables, and facilities necessary for drilling services.

Mode of Operation : Agent

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|---|--------------------------------|---------------------------------------|----------------|----------------------|---|-----------------------------------|
| | Key Personnel | | Facilities E.g. Warehouse, E.g. Tools | | Company's Experience | | Quality E.g. ISO, API Standard |
| Designation | Qualification | Experience | Dockyard | L.g. 10013 | | E.g. CIDB, DOSH | L.g. 100, Al Totalidard |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | minimum 5 years | Principal : Certificate Registry of Rig | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas. | | | | | |
| Master Mariner | Master of 3000GT or more Unlimited Voyages (STCW95) – Class 1 | | | | | | |

Work Category : Wells

30111110S

Wells Rigs Services Drilling Rigs Offshore - Drill Ship

Work Category's Description : The provision of drill ship including manpower, equipment, ROV, consumables, and facilities necessary for drilling services.

Mode of Operation : Rig operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|---|--------------------------------|--------------------------|-------------------------|----------------------|---|-----------------------------------|--|--|--|--|
| | Key Personnel | | | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 150, Art Standard | | | | |
| Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | | Principal: Certificate Registry of Rig | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | |
| | Master of 3000GT or more Unlimited Voyages (STCW95) – Class 1 | | | | | | | | | | |

Work Category : Wells
Rigs Service:

30111110S

Wells Rigs Services Drilling Rigs Offshore - Drill Ship

Work Category's Description : The provision of drill ship including manpower, equipment, ROV, consumables, and facilities necessary for drilling services.

Mode of Operation : Rig owner operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|------------------------|---|--------------------------------|-------------------------------|-------------------------|----------------------|---|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. Tools | | E.g. CIDB, DOSH | E.g. 100, Al Totalidard | | | | | |
| Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | Drill Ship | | Rig Owner Operator must provide the following documents: | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | Rig Certificate of | | | | | | |
| | Master of 3000GT or more Unlimited Voyages (STCW95) – Class 1 | | | | | Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities Agreement from Local Bank 4. Official Letter from the | | | | | | |

Wells Rigs Services Drilling Rigs Offshore - Jackup Rig Services 30111111S

Work Category's Description The provision of Jackup Rig including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation Agent

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|------------------------|--------------------------------|-----------------------------|-----------------|----------------------|---|------------------------|
| | Key Personnel | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company & Expendice | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | minimum 5 years | Principal : Certificate Registry of Rig | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas. | | | | | |

Wells
Rigs Services
Drilling Rigs
Offshore - Jackup Rig Services

30111111S

Work Category's Description $The \ provision \ of \ Jackup \ Rig \ including \ manpower, \ equipment, \ consumables, \ and \ facilities \ necessary \ for \ drilling \ services.$

Mode of Operation Rig operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|-------------------------------|--------------------------------|-----------------------------|------------|----------------------|---|------------------------|--|--|--|--|
| Key Personnel | | | Facilities | Equipment | | External Body | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Operation/ Rig Manager | | 10 years in drilling operation | Office setup in Malaysia | | | Principal: Certificate Registry of Rig | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | |

30111111S

Wells
Rigs Services
Drilling Rigs
Offshore - Jackup Rig Services Work Category's Description $The \ provision \ of \ Jackup \ Rig \ including \ manpower, \ equipment, \ consumables, \ and \ facilities \ necessary \ for \ drilling \ services.$

Mode of Operation Rig owner operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---------------|-------------------------------|--------------------------------|--------------------------|----------------------|-------------------------------|---|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | | |
| | | 10 years in drilling operation | Office setup in Malaysia | Jackup Rig | | Rig Owner Operator must provide the following documents: 1. Rig Certificate of Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities Agreement from Local Bank | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | Official Letter from the Company showing the breakdown of the rig ownership in percentage (%) | | | | | | |

Work Category Wells Rigs Services Drilling Rigs Offshore - Self Contained/Platform Rig Services

30111112S

Work Category's Description The provision of self contained/platform rig services including manpower, equipment, consumables, and facilities necessary for drilling services

Mode of Operation Agent

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|------------------------|--------------------------------|-----------------------------|----------------|---|-------------------------------|------------------------|
| Key Personnel | | | Facilities | Equipment | Company's Experience | External Body Registration | Quality |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | Principal to have minimum 5 years experience in drilling, | | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas. | | | | | |

30111112S

Wells
Rigs Services
Drilling Rigs
Offshore - Self Contained/Platform Rig Services
'--aluding manpower, equip Work Category's Description The provision of self contained/platform rig services including manpower, equipment, consumables, and facilities necessary for drilling services

Mode of Operation Rig operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | |
|------------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------|----------------------|-------------------------------|-----------------------------------|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 10015 | | E.g. CIDB, DOSH | L.g. 130, AFI Standard | | | | |
| Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | |

Wells
Rigs Services
Drilling Rigs
Offshore - Self Contained/Platform Rig Services 30111112S

Work Category's Description : The provision of self contained/platform rig services including manpower, equipment, consumables, and facilities necessary for drilling services

Mode of Operation Rig owner operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|------------------------|-------------------------------|--------------------------------|-------------------------------|---------------------------------|----------------------|--|-----------------------------------|--|--|--|--|--|
| | Key Personnel | | Facilities E.g. Warehouse, | Equipment E.g. Tools | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | L.g. 100is | | E.g. CIDB, DOSH | L.g. 150, Ari Standard | | | | | |
| Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | Self Contained/ Platform Rig | | Rig Owner Operator must provide the following documents: 1. Rig Certificate of Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities Agreement from Local Bank 4. Official Letter from the | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | Company showing the breakdown of the rig ownership in percentage (%) | | | | | | |

Wells Rigs Services Drilling Rigs Offshore - Semi-Submersible

30111113S

Work Category's Description The provision of semi-submersible including manpower, equipment, consumables, and facilities necessary for drilling services

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|-------------------------------|--------------------------------------|--------------------------|-------------------------------|-----------------------------------|---|------------------------|--|--|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. 150, API Standard | | | | | |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | minimum 5 years | Principal : Certificate Registry of Rig | | | | | | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | | |

Wells Rigs Services Drilling Rigs Offshore - Semi-Submersible 30111113S

Work Category's Description The provision of semi-submersible including manpower, equipment, consumables, and facilities necessary for drilling services

Mode of Operation Rig operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|------------------------|-------------------------------|--------------------------------|-------------------------------|------------|----------------------|---|-----------------------------------|--|--|--|--|--|
| Key Personnel | | | Facilities E.g. Warehouse, | | Company's Experience | | Quality E.g. ISO, API Standard | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. 1001S | | E.g. CIDB, DOSH | L.g. 130, AFI Standard | | | | | |
| Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | | Principal: Certificate Registry of Rig | | | | | | |
| HSE Manager | Degree | 5 years in oil and gas. | | | | | | | | | | |

Wells Rigs Services Drilling Rigs Offshore - Semi-Submersible 30111113S

Work Category's Description The provision of semi-submersible including manpower, equipment, consumables, and facilities necessary for drilling services

Mode of Operation Rig owner operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | | | |
|---|-------------------------------|--|--------------------------|----------------------|--|--|--|--|--|--|--|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | | | | | | |
| | Diploma in engineering | 10 years in drilling operation 5 years in oil and gas | Office setup in Malaysia | Semi-Submersible Rig | | Rig Owner Operator must provide the following documents: 1. Rig Certificate of Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities Agreement from Local Bank 4. Official Letter from the Company showing the breakdown of the rig ownership in percentage (%) | | | | | | |

Wells Rigs Services Drilling Rigs Offshore - Tender Assisted

30111114S

Work Category's Description The provision of tender assisted including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---|-------------------------------|--------------------------------|-----------------------------|------------|----------------------|---|------------------------|--|--|--|
| | Key Personnel | | | Equipment | | External Body | Quality | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | minimum 5 years | Principal : Certificate Registry of Rig | | | | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas | | | | | | | | |

Work Category : Wells

30111114S

Wells
Rigs Services
Drilling Rigs
Offshore - Tender Assisted

Work Category's Description : The provision of tender assisted including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation : Rig operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|--------------------------------|--------------------------|------------|----------------------|---|-----------------------------------|--|--|
| Key Personnel | | E.g. Warehouse, | | Equipment | Company's Experience | External Body Registration | Quality E.g. ISO, API Standard | | |
| Designation | Qualification | Experience | Dockyard E.g. Tools | E.g. 1001S | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | | 10 years in drilling operation | Office setup in Malaysia | | | Principal: Certificate Registry of Rig | | | |
| HSE Manager | Degree | 5 years in oil and gas | | | | | | | |

Work Category : Wells

30111114S

Wells Rigs Services Drilling Rigs Offshore - Tender Assisted

Work Category's Description : The provision of tender assisted including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation : Rig owner operator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|---------|--|--------------------------|----------------------|--|---|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| | | 10 years in drilling operation 5 years in oil and gas | Office setup in Malaysia | Tender Assisted | | Rig Owner Operator must provide the following documents: 1. Rig Certificate of Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities Agreement from Local Bank 4. Official Letter from the Company showing the | |
| . io E managol | -209.00 | o your and and gas | | | | breakdown of the rig ownership in percentage (%) | |

Wells Rigs Services Drilling Rigs Onshore - Land Oilfield Rig Services 30111115S

Work Category's Description The provision of land oilfield rig services including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---|-------------------------------|--------------------------------|-----------------------------|------------|--|---------------------------------|------------------------|--|--|--|
| Key Personnel | | Facilities | Equipment | | External Body | Quality | | | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | Registration E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| Company/ Principal: Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | Principal to have minimum 5 years experience in drilling | | | | | |
| Company/ Principal: HSE Manager | Degree | 5 years in oil and gas | | | | | | | | |

Wells
Rigs Services
Drilling Rigs
Onshore - Land Oilfield Rig Services 30111115S

Work Category's Description : The provision of land oilfield rig services including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation Rig operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|---------------|-------------------------------|--------------------------------------|--------------------------|-------------------------------|---|-----------------|------------------------|--|--|--|
| Key Personnel | | Facilities Equipment E.g. Warehouse, | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | |
| | | 10 years in drilling operation | Office setup in Malaysia | | Principal to have minimum 10 years experience in drilling | | | | | |
| HSE Manager | Degree | 5 years in oil and gas | | | | | | | | |

30111115S

Wells
Rigs Services
Drilling Rigs
Onshore - Land Oilfield Rig Services Work Category's Description The provision of land oilfield rig services including manpower, equipment, consumables, and facilities necessary for drilling services.

Rig owner operator Mode of Operation

| | | | MINIMUM TECHNIC | AL REQUIREMENT | | | |
|---|------------------------|---|--------------------------|----------------------|--|---|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | Land Oilfield Rig | | Rig Owner Operator must provide the following documents: 1. Rig Certificate of Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities | |
| HSE Manager | Degree | 5 years in oil and gas | | | | Agreement from Local Bank 4. Official Letter from the Company showing the breakdown of the rig ownership in percentage (%) | |

30111116S

Wells Rigs Services Drilling Rigs Swamp Barge Oilfield Rig Services

Work Category's Description The provision of swamp barge oilfield rig services including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation Rig operator

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | | |
|------------------------|-------------------------------|--------------------------------|--------------------------|-------------------------------|--|------------------------|--|--|--|--|
| Key Personnel | | Facilities Equipment Co | Company's Experience | External Body Registration | Quality | | | | | |
| Designation | Qualification | Experience | Dockyard E.g. Tools | | E.g. CIDB, DOSH | E.g. ISO, API Standard | | | | |
| Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | Office setup in Malaysia | | Principal to have minimum 10 years experience in drilling. | | | | | |
| HSE Manager | Degree | 5 years in oil and gas | | | | | | | | |

Wells Rigs Services Drilling Rigs Swamp Barge Oilfield Rig Services 30111116S

Work Category's Description The provision of swamp barge oilfield rig services including manpower, equipment, consumables, and facilities necessary for drilling services.

Mode of Operation Rig owner operator

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---|------------------------|---|-------------------------|--------------------------|--|---|--|
| Key Personnel Designation Qualification Experience | | Facilities E.g. Warehouse, Dockyard | Equipment E.g. Tools | Company's Experience | External Body Registration E.g. CIDB, DOSH | Quality E.g. ISO, API Standard | |
| Operation/ Rig Manager | Diploma in engineering | 10 years in drilling operation | | Swamp Barge Oilfield Rig | | Rig Owner Operator must provide the following documents: 1. Rig Certificate of Registry 2. Rig Sales & Purchase Agreement 3. Loan Facilities Agreement from Local | |
| HSE Manager | Degree | 5 years in oil and gas | | | | Bank 4. Official Letter from the Company showing the breakdown of the rig ownership in percentage (%) | |

Work Category : Wells
Wells Consultancy Services
30121400S Subsea Specialised Study

Work Category's Description : The provision of subsea specialised study such as but not limited to Constructability/Installability, Commissioning/Startup, Material/Fluid Compatibility Analysis, Fatigue/Dynamic Analysis, HSE/Risk & Reliability Assurance work (i.e. RAM, FMECA, HAZOP, HAZID), Engineering Verification etc.) for Subsea Facilities

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|--|--|-----------------------------|--|----------------------|----------------------------------|------------------------|
| Key Personnel | | Facilities Equipment | Company's Experience | External Body Registration | Quality | | |
| Designation | Qualification | Experience | E.g. Warehouse, Dockyard | E.g. Tools | Company's Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | Degree/ Diploma in any engineering discipline. | 10 years experience in oil and gas design engineering with a minimum 5 years of experience in Subsea engineering design | Comprehensive office setup | Company to provide applicable software *Company to provide list of software(s) and copy of the software license(s). | | Company to have BEM registration | |
| · · | Degree/ Diploma in related engineering discipline. | 8 years experience in offshore oil and gas design engineering with a minimum 3 years of experience in Subsea engineering design | | | | | |

Wells
Wells Consultancy Services
Well Control Consultancy

30121500S

Work Category's Description The provision of well control prevention, blowout contingency planning and consultancy services

Mode of Operation Agent

| | MINIMUM TECHNICAL REQUIREMENT | | | | | | | | |
|---------------|-------------------------------|--|--------------------------|---|-------------------------------|-----------------|------------------------|--|--|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | | | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | Company o Experience | E.g. CIDB, DOSH | E.g. ISO, API Standard | | |
| | engineering discipline | Minimum 10 years experience in drilling and/or completion operation | Office setup in Malaysia | Advance well control and kick modeling software (lease/own) | | | | | |
| | | 10 years in well control prevention and blowout emergency response | | | | | | | |

Work Category : Wells

Wells
Wells Consultancy Services
30121500S
Well Control Consultancy

Work Category's Description : The provision of well control prevention, blowout contingency planning and consultancy services

| | | | MINIMUM TECHNIC | CAL REQUIREMENT | | | |
|---------------|------------------------|--|--------------------------|---|---------------------------------------|-----------------|------------------------|
| Key Personnel | | Facilities E.g. Warehouse, | Equipment | Company's Experience | External Body Registration | Quality | |
| Designation | Qualification | Experience | Dockyard | E.g. Tools | , , , , , , , , , , , , , , , , , , , | E.g. CIDB, DOSH | E.g. ISO, API Standard |
| | engineering discipline | Minimum 10 years experience in drilling and/or completion operation | Office setup in Malaysia | Advance well control and kick modeling software (lease/own) | | | |
| | | 10 years in well control prevention and blowout emergency response | | | | | |