KEBD/MWM/SA/GHCL/191393\_30.11.2019 Business Address: Plot # Ka 34, Jagannathpur, Vatara, Dhaka – 1229, Bangladesh

VAT Reg. No: 18141110133

**Summary for the Scope of Supply (1XTCG2020V20)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Qty** | **Description** | **MWM/KEBD** | **Owner** | **Remarks** |
| **Supply** | **Supply** |
|  | **MWM ENGINE** |  |  |  |
| 1 | Gas Engine Model TCG2020V20 |  |  |  |
|  | with accessories for operation on |  |  |  |
|  | Natural Gas with Methane No. 80 Painting in RAL 5010 | ✓ |  |  |
| 1 | **TEM EVO** (Total Electronic Management) |  |  | Loose supply |
|  | Control and supervision all relevant |  |  |  |
|  | Functions of gas engine and engine (auxiliary drives) | ✓ |  |  |
|  | All housed in an IP 54 protection cabinet) |  |  | Loose supply |
|  |  |  |  |  |
| 1 | Batteries for TEM units 24V |  | ✓ | Loose supply |
|  |  |  |  |  |
|  | **ALTERNATOR** |  |  |  |
| 1 | Marelli Alternator |  |  |  |
|  | Brushless double bearing 4 poles |  |  |  |
|  | 11 KV, 50Hz, 0.8/1.0PF, 1500rpm | ✓ |  |  |
|  |  |  |  |  |
|  | **BASEFRAME** |  |  |  |
| 1 | Steel Plate fabricated base frame, mechanically processing, Post Weld Heat Treatment and Surface-protective treatment | ✓ |  |  |
| 1 set | Anti - Vibration Isolators | ✓ |  | Loose supply |
| 1 | Assembly, engine coupled to alternator | ✓ |  |  |
| 1 | Flexible coupling | ✓ |  |  |
|  |  |  |  |  |
|  | **AIR INTAKE SYSTEM** |  |  |  |
| 1 | Dry type air filter with restriction indicator | ✓ |  |  |
|  |  |  |  |  |
|  | **EXHAUST SYSTEM** |  |  |  |
| 1 | Exhaust Silencer 25 dB attenuation | ✓ |  | Loose supply |
| 1 | Exhaust gas back pressure switch with mounting | ✓ |  | Loose supply |
| 1 set | Exhaust Compensator (after turbo) | ✓ |  | Loose supply |
| 1 set | Exhaust Turbocharger | ✓ |  |  |
| 1 | Dry exhaust manifolds | ✓ |  |  |
|  |  |  |  |  |
|  | **COOLING SYSTEM** |  |  |  |
| 1 | Jacket water pump HT, electric motor driven | ✓ |  | Loose supply |
| 1 | Intercooler water pump LT, electric motor driven | ✓ |  | Loose supply |
| 1 set | Three-Way Valve (1 x JW & 1 x Mixture Intercooler) | ✓ |  | Loose supply |
| 1 | Cooling water Preheater | ✓ |  | Loose supply |
| 1 | Jacket cooling water supervision unit with level switch | ✓ |  | Loose supply |
| 1 set | Auto Venting Device and pressure reducing valve | ✓ |  | Loose supply |
| 1 set | Expansion tank | ✓ |  | Loose supply |
| 1 set | Differential pressure switch for flow mounting | ✓ |  | Loose supply |
| 1 Set | Cooling Tower |  | ✓ | Loose supply |
| 1 Set | Raw Water Pump |  | ✓ |  |
| 1 Set | HT PHE | ✓ |  |  |
| 1 Set | LT PHE | ✓ |  |  |
|  |  |  |  |  |



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Qty** | **Description** | **MWM/KEBD** | **Owner** | **Remarks** |
| **Supply** | **Supply** |
|  | **LUBE OIL SYSTEM** |  |  |  |
| 1 | Lube oil cooler (engine mounted) | ✓ |  |  |
| 1 | Lube oil filter (engine mounted) | ✓ |  |  |
| 1 | Pre-lube oil priming pump set (engine mounted) | ✓ |  |  |
| 1 | Two solenoid valves for automatic oil top-up | ✓ |  | Loose supply |
|  |  |  |  |  |
|  | **STARTING SYSTEM** |  |  |  |
| 1 | Engine electric starter motor | ✓ |  |  |
| 1 lot | Starting Battery, 24V |  | ✓ |  |
| 1 lot | Cabling and terminal clamp |  | ✓ |  |
|  |  |  |  |  |
|  | **GAS FUEL SYSTEM** |  |  |  |
| 1 | Gas Pressure control train | ✓ |  | Loose supply |
| 1 | Pre-pressure regulator | ✓ |  | Loose supply |
| 1 | Air/gas mixer unit (mounted on engine) | ✓ |  |  |
| 1 | Electronic controlled ignition system | ✓ |  |  |
| 1 | Flexible gas pipe | ✓ |  |  |
| 1 lot | Industrial spark plugs (mounted on engine) | ✓ |  |  |
|  |  |  |  |  |
|  | **ALTERNATOR POWER /AUX /CONTROL SYSTEM** |  |  |  |
| 1 | Generator control panels with TEM Aux. Control Panels: - | ✓ |  |  |
|  | - For measuring |  |  |  |
|  | - For protection |  |  |  |
|  | - For synchronizing |  |  |  |
|  | - For control of auxiliaries |  |  |  |
|  |  |  |  |  |
| 1 | Low Voltage MCC Panel | ✓ |  |  |
| 1 | MV Incomer Panel (Generator) | ✓ |  |  |
| 1 | MV Bus PT |  | ✓ |  |
| 1 | MV Outgoing Feeder |  | ✓ |  |
| 1 | MV Aux. Transformer Outgoing |  | ✓ |  |
| 1 | Aux. Transformer |  | ✓ |  |
| 1 | NGR with NGS |  | ✓ |  |
| 1 job | Transportation, loading/unloading, civil construction, foundation, supply & installation of ventilation works, piping works, cabling works & fittings |  | ✓ | Local work |