

1. ITEMS AND QUANTITIES

NO.	ITEM NO.	DESCRIPTION	QUANTITY
1.	C-4402A/B	Net Gas Compressors	2 Package
Total			2 Package

2. APPLICABLE CODES AND STANDARDS

The latest editions of codes and standards listed below shall be considered as integral parts of this Requisition. If the additional code and standard to the below is stipulated and referenced in the attached specifications, data sheets and drawings, those also shall be considered as integral parts of this Requisition.

- [✓] API 618 : Reciprocating Compressors for Petroleum, Chemical and Gas Industry Services (Latest Ed.)
- [✓] API 614 : Lubrication, Shaft Sealing and Control Oil Systems
- [✓] API 670 : Machinery Protection System
- [✓] API 671 : Special Purpose Coupling
- [] API 676 : Positive Displacement Pumps
- [✓] API 677 : General Purpose Gear Units
- [✓] ASME BPVC Section II : Material
- [✓] ASME BPVC Section IX : Welding and Brazing Qualifications
- [✓] ASME BPVC Section V : Nondestructive Examination
- [✓] ASME B16.5 : Steel Pipe Flanges and Flanged Fittings (Latest Ed.)
- ASME B16.47 Series B
- ASME B31.1 : Welding and Brazing Qualification
- ASME B31.3 : Process Piping
- [✓] NFPA : National Fire Protection Association
- [✓] Electricals : IEC, NEC
- [✓] Vendor refers to Data sheet and/or Specification

3. SCOPE OF SUPPLY AND WORK

3.1. SCOPE OF SUPPLY

Items and Quantities Shown on Para. 1, consist of following components;

3.1.1. Reciprocating Compressors shall be complete in all respect including;

- [✓] Compressor

- [✓] Pulsation Suppressors
 - [✓] Acoustical Simulation Study
 - [✓] Data sheet & Skeleton Drawing for Suction & Inter Stage Drums
 - [✓] Data sheet & Skeleton Drawing for Suction & Inter Stage Coolers
 - [✓] Relief Valves (Inter-stage & Final Discharge)
 - [✓] Common Base-plate for Compressor and Driver
 - [✓] Compressor Control and Shutdown System
 - [✓] Permanent & Temporary Suction Strainers **with Spool Piece**
 - [✓] Vibration and Temperature Detectors
- 3.1.2. Electric Motor Drivers including;
- [✓] Temperature Detectors
- 3.1.3. Coupling
- [✓] Couplings
 - [✓] Non-Sparking Coupling Guards
- 3.1.4. Cooling System
- [✓] Base-plate for Cooling System
 - [✓] Main & Standby Cooling Water Pumps with Motors
 - [✓] Coolant Reservoir
 - [✓] Coolant Heat Exchangers
- 3.1.5. Lube Oil Systems including;
- [✓] Cylinder Lubricating System**
 - [✓] Base-plate for Lube Oil System
 - [✓] Main & Standby Lube Oil Pumps with Motors
 - [✓] Dual type Lube Oil Filter
 - [✓] Lube Oil Cooler
 - [✓] Lube Oil reservoir
 - [✓] Gauge Board / Panel with Instrumentation
 - [✓] Oil Piping and Auxiliary Piping
- 3.1.6. Instrumentation and Control
- [✓] Instrumentation (on skid & off skid)
 - [✓] Skid mounted Junction Boxes
 - [✓] Instrument tubing and wiring on skid, cable glands and trays
 - [✓] **Local Panel and** Local Gauge Boards
 - [✓] Local Switch Box**
 - [✓] Flow Meters
 - [✓] Thermowells (Material : 316L)
- 3.1.7. Electrical System
- [✓] Lube Oil Heaters
 - [✓] On-skid cabling, cable glands, trays and fittings
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3.1.8. Accessories

- [✓] Piping, Tubing and Supports
 - All Piping, Tubing and Supports (within each skid)
- [✓] Acoustic Enclosure, **if required**
- [✓] 304SS Name plate with its bracket
- [✓] Accessories for fixing all equipment including template, anchor & foundation bolts/nuts, sole plates, shim plates, positioning screws, leveling pads, setting bolts/nuts and etc.
- [✓] Gaskets
- [✓] Clips for pipe supports, guides & fire proofing
- [✓] Heat tracing, insulation and lagging
- [✓] Lifting lugs
- [✓] **Spreader Bar, if required**
- [✓] Earth lugs
- [✓] Blind flange with gasket, bolt and nuts
- [✓] Skid for transportation and shipping

3.1.9. Others

- [✓] Capital spare parts : Vendor shall recommend (optional)
- [✓] Special tools for installation and maintenance if required
- [✓] Spare parts for erection and commissioning
- [✓] Spare parts to cover normal two years operation (optional)
- [] Initial Charge of Lube Oil
- [✓] Operation & Maintenance manual
- [✓] Other necessary accessories for complete operational unit
- [✓] Others specified in this Requisition and Applicable Specifications

3.2. SCOPE OF WORK

- [✓] Performance guarantee
 - [✓] Mechanical design and guarantee
 - [✓] Mechanical strength calculation
 - [✓] Lateral and torsional analysis
 - [✓] Foundation design information including loading, arrangement & assembly drawings
 - [✓] Manufacturing & Fabrication/ Assembling
 - [✓] Shop Test & Inspection in accordance with code and specification including;
 - [✓] Visual Inspection
 - [✓] Hydrostatic Test
 - [✓] Performance Test
 - [✓] Mechanical Running Test
 - [✓] Vibration Test
 - [✓] Noise Level Test
 - [✓] Rust Prevention and Painting inspection
 - [✓] Shipping & Packing Inspection
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- ☒ Painting (☒ Primer ☒ Finish)
- ☒ Protection & Export Packing (☒ Inland ☒ Seaworthy)
- ☒ Rust prevention for 6 month outdoor storage at field before shipment
- ☒ Acid Pickling and Passivation for the surface of stainless steel component
- ☒ Explosion Certification
- ☐ Transportation up to Site
- ☒ Kick off meeting at vendor's office or Purchaser's office
- ☒ Pre-Inspection Meeting
- ☒ Application of Local regulation & Law
- ☒ Documentation as required in "Vendor Data Requirement" in this requisition
- ☒ Other activities required to complete equipment manufacturing
- ☒ Other accessories / works required for safe operation (Not referred in this requisition)
- ☒ Others specified in this requisition

3.3. SPARE PARTS AND/OR SPECIAL TOOLS

Vendor shall supply the spare parts in two (2) categories only for the equipment in vendor's scope of supply.

Spare parts for erection, testing and pre-commissioning shall be shipped together with the equipment.

3.3.1. Spare Parts

Vendor must submit two (2) Operation Spare Parts List recommended by Vendor with price.

3.3.2. Special Tools

If required, Vendor shall provide special tools for installation and maintenance.

3.4. OUT OF SCOPE

- ☒ Motor starters (MCC)
- ☒ Foundation
- ☒ Field Erection & Installation

4. DEVIATION FROM PURCHASER'S REQUIREMENTS

Vendor's proposal shall be in strict conformity with Purchaser's requirements.

Unless exceptions, deviations, or alternatives are clearly listed and submitted by using Clarification / Exception / Deviation Table to be submitted with Vendor's proposal.

Purchaser will regard the requirements and conditions in this requisition shall be deemed and be accepted by Vendor without any price and delivery impact.

5. TEST & INSPECTION

Inspection and tests shall be made by Vendor in accordance with;

- ☒ Requirements specified in Data Sheets and / or Applicable Specifications attached herein.
 - ☐ Vendor's proposed procedure approved by Purchaser
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