Specifications: SPP-MECH Capex. 2018-19

#### C-48-PI-1902

Item Description: Water Circulation Pump CT Bank 12/13

**Quantity:** 01 No.

## 1- Specifications:

Type Single Stage - Double Suction – Horizontal – Centrifugal

Suction to discharge flange distance 1100 mm

Code / Standard API 610, ANSI

Capacity 5810 US GPM / 1319.451 m3/h

Min. Allowable Flowrate 1545 US GPM
Mass Flow rate 825.12 lb m/s
Head 139 FT./ 42.3672 m

Rotational Speed 1750 rpm

Driver Power 350 HP (Steam turbine)

Discharge Pressure 75 psig Suction Pressure.A 14.7 psig

Service Fluid :Treated Cooling Water (pH range 6 – 10) Sulfuric acid is being used to control pH

& Sodium Hypochlorite is using as oxidizing biocide.

Pumping Temperature 86-105 °F
Fluid Density 61.914 lb/ft3
Fluid Viscosity 0.0010 in/s
Specific Gravity 0.998
NPSHa 25 ft
Max. Head 190 ft
Efficiency % 75% Min

Casing Split Axial Split Volute Casing

Casing Mount Foot

Packing Gland Type Hydrotest Pressure 165 psig

Pressure Gauge Connection: G ½ (Drilled and plugged) on suction / discharge Drain / Vent Point: G ½ with four-way connector and vent plugged.

Suction Nozzle: ISO 7005/2 DN 300, PN 16, Drilling + Seal Face per 21/A Discharge Nozzle: ISO 7005/2 DN 250, PN 16, Drilling + Seal Face per 21/A

Direction of Pump from drive: Clockwise

Material: Volute casing: Gray Cast Iron
Shaft: Chrome Steel 1.4021+QT800
Impeller: GX2CRNIMOCUN25-6-3-3 1.4517

Bearing Housing (350.1): Grey Cast Iron JL 1040

Noise Level 90 db Max.

#### **Site Conditions**

Temperature: 31 − 128 °F Location: Outdoor

### 2- Special terms and conditions:

# 2.1 <u>Mandatory Requirements:</u>

### Bidder Compliance Checklist:

Bid documents shall not be considered without submission of duly filled, signed and stamped bidder compliance checklist.

# 2.2 After Sales Services

Vendor shall be the authorized local representative of OEM and shall submit documentary proof from OEM at the time of bid submission.

Availability of after sales services to be ensured for at least next 5 years.

## 2.3 <u>Documents / Literature:</u>

Vendor shall provide 02 sets of hard and a set of soft copy of operation / maintenance manuals, procedures and list of spare parts along with part no. and all related technical literature at the time of delivery.

FAT / performance test certificate shall be provided at the time of delivery.

### 2.4 Warranty:

Two-year warranty of any defect from the date of delivery.

Vendor shall be liable to provide technical support and services for rectification of any malfunctioning free of cost during warranty period.

Remarks: Refer ANNEXURE-A, mandatory bidder Compliance checklist, which is required to be duly filled, signed and stamped by bidder.