

## Annexure-A

### Cooling Water pump with motor base & accessories - 2 set

J. Dmilkam  
11.08/02/2018

Type of pump	:	Centrifugal
Duty	:	To pump water
Capacity	:	45 m <sup>3</sup> /hr.
Total Discharge Head (TDH)	:	28 m.
Density of water	:	1.04
Gland Sealing	:	Gland packed on sleeve with internal cooling water circulation.
Impeller	:	Closed
Suction	:	Flooded.
Delivery	:	Pump stuffing box

#### **MOC**

Impeller	:	CS
Wetted part	:	CS
Sleeve	:	SS 304
Shaft	:	EN8
Base	:	Fabricated only.
Coupling make	:	Tyre Coupling of Unique / Fenner / Love joy.
Motor	:	Crompton/ Siemens/ ABB
Motor selection Margin	:	30% above brake horse power required
Power rating	:	440V (+/- 5%), Class -B/F, IP-65 insulation, 3 Ph, 50 Hz, A.C. Supply, IE-3.

Pump should also be supplied with the following spares

- Spares: 1 set spare of casing & impeller.
- Spares: 2 set spares of shaft.

J. Dmilkam  
11.08/02/2018

## Enclosure - 1

**The offer must be submitted in the given format**

Pump model & type offered	-	
Speed of the pump	-	
Suction & discharge (mm)	-	
Type of drive	-	
Type & make of coupling	-	
Capacity offered (m <sup>3</sup> /hr)	-	
Head (m)	-	
NPSH required	-	
BKW required	-	
Motor offered make & rating	-	
Impeller type & diameter offered	-	
Full size of impeller offered	-	
Drive end bearing* No.	-	
Non drive end bearing* No.	-	
Shaft diameter at impeller end	-	
Distance between NDE bearing and impeller	-	
Distance between bearings (NDE & DE)	-	
Weight of bare pump (Kgs.)	-	
Weight of structural base (Kgs.)	-	
Weight of motor (Kgs.)	-	
Type of lubrication offered	-	
Material of construction of		
a) Casing	-	
b) Impeller	-	
c) shaft	-	
d) shaft sleeve	-	
Gland sealing arrangement	-	
Efficiency of pump		
No of stages		

\*SKF Bearing only

Pump flange shall be drilled as per ANSI 16.5

1  
J. [Signature] 05/02/2018

## Enclosure – 2

The offer must contain the following details.

1. Material of construction of all parts.
2. Weight of pump, structure & base separately.
3. Detail constructional drawing / sectional drawing of pump with details of bearing fitted along with leaflets.
4. G.A. drawing of pumps & motor with dimensions.
5. Dimension of pump base and associated structure.
6. Characteristics curve containing impeller size, head, efficiency, power, NPSH ® etc.
7. All the pumps should be supplied with heavy duty bearing for continuous service.
8. Coupling shall preferably be tyre coupling type of UNIQUE /FENNERMAKE. Base should be structurally fabricated. Cast base is not acceptable.
9. Bifurcation of price of pump, motor, base & accessories must be given because order may be placed for full set or part thereof. Taxes, duties, P&F charges should be mentioned clearly.
10. 18month guarantee period for proper performance of pump has to be given from the date of supply of the equipment. Bank guarantee of amount equivalent to 5% of the value of the order valid for performance guarantee period will have to be submitted <sup>After</sup> ~~before~~ the release of <sup>Purchase order</sup> ~~full payment~~.

J. D. Dhanu / 08/02/2018

**Offer without the aforesaid details will be rejected out rightly and no further communication will be entertained.**

J. D. Dhanu / 05/08/2018