

OPGCL, BANHARPALLI AUXILIARY BOILER
TECHNICAL SPECIFICATION FOR BOILER FEED WATER PUMP

GENERAL DATA SHEET

1.	Project	:	OPGCL AUXILIARY BOILER
2.	Customer	:	OPGCL
3.	No.of Pumps	:	2 Nos. (1 working + 1 standby) Each pump shall be of 100% capacity
4.	Type	:	Single Suction, Multi stage, Horizontal, Centrifugal, motor driven, Ring section type
5.	Location	:	Out door
6.	Duty	:	Continuous, 100% duty
7.	Fluid handled	:	Feed Water
8.	a) Design flow capacity of one Pump	:	70 T/Hr.
	b) Normal flow capacity of one pump	:	60 T/Hr.
	b) Min. flow capacity of one pump	:	To be furnished by bidder
9.	a) Pump suction pressure	:	0.9* Kg/cm ² (g)
	b) Pump discharge pressure	:	35 Kg/cm ² (g)
10.	Specific gravity of feed water	:	0.95238
11.	Temperature	:	105° C
12.	NPSH available	:	7 M* of water column
13.0	<u>Material of construction</u>		
13.1	Casing	:	ASTM A216WCB
13.2	Impeller	:	ASTM A743 CA6NM
13.3	Shaft	:	AISI 410
13.4	Wearing ring	:	ASTM A743 CA6NM
13.5	Base plate	:	MS fabricated
14.0	Nozzle orientation	:	Top suction/top discharge

* Suction strainer drop is not considered while arriving at Feed Pump Suction pressure and NPSH available.

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PUMP DATA SHEET (To be filled and submitted by bidder)

- | | | |
|------|--|---|
| 1.0 | Model and type | : |
| 2.0 | Quantity | : |
| 3.0 | Capacity | : |
| 4.0 | Total head | : |
| 5.0 | Suction pressure | : |
| 6.0 | Pump shut off head at cold | : |
| | Pump shut off head at hot | : |
| 7.0 | NPSH (pump) required | : |
| 8.0 | Fluid handled and
Concentration | : |
| 9.0 | Operating temperature | : |
| 10.0 | Specific gravity of the fluid | : |
| 11.0 | Nominal speed | : |
| 12.0 | Nominal power | : |
| 13.0 | Pump input power with
Liquid at rated rpm | : |
| 14.0 | Pump efficiency | : |
| 15.0 | Motor rating | : |
| | PUMP MINIMUM FLOW | : |
| 16.0 | <u>Pump construction</u> | |
| a. | Casing | : |
| b. | No. of stages | : |
| c. | Packing | : |
| d. | Type of coupling | : |
| e. | Suction flange size
and rating | : |
| f. | Discharge flange
size and rating | : |
| g. | Flange standard | : |

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- h. Cooling water requirement :
- i. Pump bearing type number :
- j. Impeller diameter :

17.0 Material of construction

- a. Casing :
- b. Impeller :
- c. Stuffing box cover :
- d. Shaft sleeve :
- e. Shaft :
- f. Wearing rings :
- g. Base plate :

18.0 Hydro test pressure of pump and testing standard :

19.0 Weight schedule

- a. Base pump :
- b. Motor :
- c. Base plate :
- d. Pump motor assembly mounted on base plate along with coupling, strainer etc. :

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20.0 Companion flange suction/discharge

- a. Size :
- b. Type :
- c. Rating :
- d. Standard :
- e. Flange material :
- f. Bolt material :
- g. Nut/gasket material :

21.0 Cooling water requirements :

22.0 Sealing data :

23.0 Coupling data :

24.0 Instrumentation data :

25.0 Strainer data :

26.0 Lube oil system data :

27.0 Warm up arrangement :
requirement

28.0 Allowable forces and :
moments at pump nozzles

29.0 Civil work data :

Note: Necessary drawings, catalogues, leaflets shall be submitted along with the filled up Annexure-B.