



ACU/PS/AHRC/Clsd-Tender/ 42 /2022-23

Date: 21.06.2022

RETENDER NOTIFICATION

Adichunchanagiri University is inviting **closed tender** for the supply of *Steam Boiler* to "Adichunchanagiri Hospital and Research Centre (AHRC)", B.G. Nagara, from the competitive firms.

| | | |
|---|---------------------------------|--|
| 1 | Name of the work | Supply, Installation and Commissioning of <i>Steam Boiler</i> to Adichunchanagiri Hospital and Research Centre |
| 2 | Last date for tender submission | On or Before 08.07.2022 up to 05:00 PM |

| Sl. No. | Name of the Goods Particulars | Provisional Qty. (In No's) |
|---------|---------------------------------|-------------------------------|
| 1. | Steam Boiler | 01 |

Note: Kindly send quotes in 2 bid formats (Technical and Financial bids sealed separately inside the main envelope for each individual item or list of items) to be addressed to "**The Registrar, Adichunchanagiri University, B.G. Nagara -571448, Nagamangala (T), Mandya(D)**".

- Adichunchanagiri University reserves all the rights to accept, reject, incorporate changes and re-tender without giving any reasons.
- The sealed cover must be duly superscripted with the words "ACU/AHRC/Clsd Tender/Boiler/Ref no" Or tender details for which company is quoting.
- Attach Brochure, Certification of the product, Bank/account details, PAN, GSTIN and 02 Years of ITR declaration inside the envelope and **company contact details with email ID** on the main envelope cover for **further correspondence**.
- Quote for **unit price** with applicable GST (display GST at extra column) and goods must have a **minimum warranty** of **03 years**.
- For any queries, please write to registrar@acu.edu.in or telephone to purchase section +91 -98458 35834 |

Dr. C.K. Subbaraya

Registrar
Adichunchanagiri University
B.G.Nagara-571448



Technical Specifications

| 1. 500kgs BOILER for LAUNDRY EQUIPMENT | | |
|--|--|-------|
| Sl. No | DESCRIPTION | QTY |
| 1 | Vertical multistage feed water pump coupled with 2HP motor mounted on base frame | 2Nos. |
| 2 | Globe valve & disc check valve with feed pipe | 2Nos |
| 3 | Water level indicator with drain cock and gauge glass tube | 2 Set |
| 4 | Blow down valve with pipe | 1 No |
| 5 | Spring loaded safety valve single post | 2 Nos |
| 6 | Pressure gauge with syphon | 1 No |
| 7 | Main steam stop valve | 1 No |
| 8 | Fusible plug | 1 No |
| 9 | Air vent valve | 1 No |
| 10 | Ladder and platform | 1 Set |
| 11 | Refractory lining | 1 Set |
| 12 | ID fan with motor | 1 Set |
| 13 | AWLC/ MOBREY unit with pre wired control panel | 1 Set |
| DETAIL | TITAN-1000 | |
| STEAM GENERATION (FROM & AT 100 DEG. C) | 500KGS/HR | |
| WORKING PRESSURE | 10.54 KG/SQ.CM | |
| HEATING SURFACE AREA | 40 SQ. MTRS. | |
| EFFICIENCY | 76 ± 3 % | |
| FUEL CONSUMPTION @ 3500GCV | 175-200 KGS/HR | |
| ELECTRICAL LOAD | 7 HP (2+2+3) | |
| MOC: Shell MOC: Tubes | SA 516 gr 70 BS 3059 ERW | |
| GRATE AREA | 1.45m ² | |





| Sl. | Boiler | Capacity |
|-----|--|--------------------|
| 1 | IBR Horizontal multi tubular boiler, 10.54 kg/cm ² [150 psi] working pressure, wood/briquette/agro-waste fired model with standard accessories | 500kgs/hr |
| 2 | Self-Supported Conical Bottom Chimney of 1000 x 500mm dia, 100FT mtrs height; ladder rung with monkey cage for 100ft Cone - 6mtrs L x 10mm thk Straight portion in 8,6 & 5mm. 6trs each section (Template & foundation bolts will be provided) MOC - IS 2062 2 coats of Heat Resistant Aluminum included Aviation lamp with 36 mtrs cable & lightening arrestor with insulator included | 1 Set |
| 3 | Supply of Multi cone Mechanical Dust Collector with rotary air lock | 1 No. |
| 4 | Duct connection from Boiler to ID fan and ID fan to Dust collector and to Chimney [Approximate 12 mtrs] | 1 Assy. |
| 5 | IBR approved Pressure Reducing Station with 40NB pilot operated Darling MuescoPRV, set of valves, by pass line, safety valve, pressure gauge, moisture separator etc | 1 Set |
| 6 | Supply of 4KL feed water cum condensate tank with 10ft structure, man hole, level gauge assembly, drain valve, 2 inlets (cold water & condensate) & 1 outlet with epoxy coating on inside & top coat outside | 1 set |
| 7 | Insulation for Boiler with 24G Al with Rockwool of 48 kg/m ³ density Cladding with Aluminum sheet | 1 Assy |
| 8 | IBR approved distribution header with 1 inlet & 3 outlets with safety valve, steam trap assembly, pressure gauge & valves for outlet (1 mtr long) | 1 Assy |
| 9 | IBR steam line from boiler to header 50NB with all bends, flanges, gaskets & hardware (as per running mtr) | 1 mtr |
| 10 | Non IBR lines Feed water tank to pumps Blow down to pit Safety valve to atmosphere | 36 mtrs |
| 11 | Supervision charges for the installation & commissioning of the above equipment | 1 set |
| 12 | Steam lines to laundry equipment | as required |





1. High thermal and fuel efficiency
2. Three-pass fully wet back design cuts losses and improves efficiency.
3. Large heating surface ensures rated evaporation capacity
4. Large furnace volume with sufficient grate area ensures complete combustion with efficient chimney design.
5. Large water holding takes care of steam load fluctuations in process.
6. High quality smoke tube design checks choking of tubes and also due to high velocity of gases.
7. Easy maintenance and accessibility of tubes for inspection.
8. Fusion class I welded pressure vessel, designed, constructed and inspected in accordance with Indian Boiler Regulations.
9. Fully assembled unit including refractory and grating for ease of installation at site

The boiler is manufactured as per the IBR approved drawing. The pressure chamber is manufactured from boiler quality plates confirming to SA 516 Gr -60 (Tube plates – 16mm, Shell & furnace– 10mm) and tubes confirming to BS 3059 1987 part -I ERW 320 with 3.66mm thickness. The boiler is provided with front and rear refractory lined doors, and refractory lined smoke boxes of 6mm thickness.

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