

Date: 24.03.2022

ACU/PS/AHRC/Clsd-Tender/ 1084 /2021-22

TENDER NOTIFICATION

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

1	N	ame of the work	Supply, Installation and Commissioning of Equipment to Adichunchanagiri Hospital a	
2	1	ender documents vailable for download	On or Before 11- 04- 2022 up to 05:00 PM	
Sl. No. Name of the Goods Particulars		Provisional Qty. (In No's)		
1.		Washer Extractor		01
2.		Tumble Dryer		01
3.		Flat Work Ironer		01
4.		Mobile 4 sheet trolley with all side covered with SS sheet		02
5.		Sluicing Machine		01
6.		Wet Trolley		02
7.		Dry trolley		02
8.		Steam Boiler		01

<u>Note:</u> 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 Tendr/Laundry/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



Technical Specifications

Description | (CAPACITY: Minimum 90 to 110 Kgs dry weight equivalent weight)

• The machine should incorporate the following features:

Industrial washer cum extractor, front loading and unloading, open pocket, soft mount, heavy duty high spin. High speed spinning capability for quick drying of linen, extraction cycle. Machine should be PLC based controlled. It should have at least 24 standard wash programs with minimum 8 variable steps in each program to customized according to the type of the fabric to be processed. It should have a pause & continue feature in case of power loss. LCD displays to visualize the step by step advancement of the cycle and user friendly parameter setting provision for various washing methods. Machine should be single motor with variable frequency inverter drive (VFD) for various speed for wash, distribution and extraction at low, normal and high spin. The machine should be steam heated with the pneumatic controlled water inlet & drain outlet. The parts of machine those are in contact with water and chemical (inner basket and outer drum) shall be of stainless steel 304 grade. Auto door lock should be provided for operational safety. This makes the door not to open at the time of operation. Machine should be provided with warning sign alarm for completion of cycle.

Technical Specification:

Washer Extractor

1.

Capacity	Minimum 90-110 Kgs dry or equivalent weight.
Inner Drum Material (Basket)	SS 304, Minimum 3.0 mm thickness
Outer Drum material	SS 304, minimum 3.0 mm thickness
Chemical Compartment	SS 316, minimum 1.2 mm thickness.
Inner drum (basket) volume	Minimum 1100 Ltrs or equivalent
Basket Diameter	Minimum 1320mm or equivalent
Basket Depth	Minimum805mm
Drive Motor	At least 25 HP motor, 3 phase, HEM make.
Inverter	Fuji / Schneider, 25 HP, 3 Ph.
Extraction Speed	Minimum 680 rpm
G – Force	Minimum 340
Water Inlet Size	Minimum 50mm dia. x 2 nos. and dia. 20mm water inlet for chemical.
Steam Inlet Size	Minimum 25 mm dia. (1").At 4 -5 bar Pressure.
Compressed Air (Inlet)	Minimum dia. 8mm (PU8)



Drain outlet Size	Minimum 150mm dia.
Bearing	SKF Heavy duty bearing.

2. Tumble Dryer

Description or Specifications | (CAPACITY: Minimum 50kg to 60 Kgs)

• The drier should incorporate the following features:

Industrial tumbler dryer, front loading unloading, open pocket, forward &reverse cylinder movement with PLC controlled. It should have at least 5 program storage capacity with automatic cool down features. Inner basket to be of stainless steel and outer body powder coated. Safety features should include manual heavy duty latch lock with door limit switch, which stops machine drum rotation when the door is opened at the time of operation. Machine should have two motors, drive motor & blower motor. The machine should be steam heated with high efficiency heater. Should be provided with a self-collecting lint mesh prior to hot air exit.

Technical Specification:

Capacity	Minimum50 kg- 60 Kg or equivalent	
Heating type	Steam	
Inner Drum	SS minimum 1.2 mm thickness	
Lint Screen	SS Lint filter mesh	
Outer body	MS Powder coated with good finish	
Cool down feature	Automatic cool down feature	
Inner drum volume	Minimum 1200 ltrs	
Basket Diameter	Minimum 1210mm	
Basket Depth	Minimum 1045mm	
Drive motor	At least 2HP AC motor HEM make	
Blower Motor	At least 2HP AC motor HEM make	
Steam Inlet Size	Minimum 1-inch dia. At 4 - 5 bar pressure.	
Condensate Outlet Size	Minimum 1 inch dia.	
Power supply	3-Phase, 415v 50Hz	
Hot air exhaust size	Minimum 200x200mm	

3. Flat Work Ironer



Description | (Roller Size: Dia. 400 x 2000mm length or equivalent)

• The ironer should incorporate the following features:

Machine is steam and roll heated type. The machine should be of front feed and front return type. Standard safety features include finger guard protection device incorporated in the machine. Machine should have emergency stop button at either side of machine for operator's safety. The flat work ironer should be inverter driven to provide smooth and variable speed control for ironing. Digital indication for speed in meters per minute and temperature in degree Celsius to be provided. Machine should have SS tray for feeding and receiving linen. Machine should have high quality feeding and heating belts.

Technical Specification:

Heated Roll dia.	Minimum 400 mm or equivalent	
Heated Roll length	Minimum 2000mm (Working width) or equivalent	
No. of Roll	01	
Ironing Speed	Minimum 1-5 mtr/min.	
Drive Motor	Minimum 1 HP	
Blower Motor	Minimum 0.75 HP	
Steam Inlet Size	Minimum 1/2" dia. At 5 bar pressure.	
Condensate Outlet Size	Minimum 1/2" dia.	
Power Supply	3-Phase +N+E, 415V, 50Hz	
Hot Air Exhaust Size	Minimum dia. 100 mm	
VFD	1 Hp, Fuji / Schneider make variable control	
Heated Roll dia.	Minimum 400 mm or equivalent	
Heated Roll length	Minimum 2000mm (Working width) or equivalent	
No. of Roll	01	
Hot air exhaust size	Minimum 200x200mm	
VFD	1 Hp, Fuji / Schneider make variable control	
Roller	Roller shall be made of mild steel – outer surface is fully polished and hard chrome plated for better ironing quality. Large contact area of roller for increased productivity.	
Feeding & ironing	Superior quality oblical polyester feeding and ironing belts for longer life.	
Safety	Front feeding side should be provided with emergency finger guard, which automatically stops the machine. Emergency stop buttons shall be provided on both side of the machine.	



4.	Mobile 4 sheet trolley with all side covered with SS sheet	
	Standard Size with standard specification	
5.	Sluicing Machine	

Description | (CAPACITY: Minimum 30 Kgs, Dry weight.)

• The machine should incorporate the following features:

Industrial washer cum extractor, front loading and unloading, open pocket, soft mount, heavy duty high spin. High speed spinning capability for quick drying of linen, extraction cycle G- force should be more than 340. Machine should be PLC based controlled. It should have at least24 standard wash programs with minimum 8 variable steps in each program to customized according to the type of the fabric to be processed. It should have a pause & continue feature in case of power loss. LCD displays to visualize the step by step advancement of the cycle and user friendly parameter setting provision for various washing methods. Machine should be single motor with variable frequency inverter drive (VFD) for various speed for wash, distribution and extraction at low, normal and high spin. The machine should be steam heated with the electric controlled water inlet & drain outlet. The parts of machine those are in contact with water and chemical (inner basket and outer drum) shall be of stainless steel 304 grade. Auto door lock should be provided for operational safety. This makes the door not to open at the time of operation. Machine should be provided with warning sign alarm for completion of cycle.

Technical Specification:

Capacity	Minimum 30 Kgs	
Heating type	Steam	
Inner Drum Material (Basket)	SS 304, Minimum 1.5 mm thickness	
Outer Drum material	SS 304, minimum 2.5 mm thickness	
Chemical compartment	SS 316, minimum 1.2mm thickness	
Inner drum (basket) volume	Minimum 300 Ltrs	
Basket Diameter	Approx. 835mm	
Basket Depth	Approx. 545mm	
Drive Motor	At least 5.5 kW motor, HEM/Equivalent make	
Inverter	Fuji / Schneider, 5.5 kW, 3 Ph.	
G – Force	Minimum 340	
Extraction Speed	Minimum 855 rpm	
Water Inlet size	Minimum 25mm dia x 2 nos. and dia. 25mm water inlet for chemical	



Drain outlet size	Minimum 75mm dia	
Steam Inlet Size	Minimum 15 mm dia. (1/2"). At 4 -5 bar Pressure.	
Power supply	3-Phase +N+E, 415V, 50Hz	
Bearing	SKF Heavy duty bearing.	

6. Wet Trolley

Description

The trolley should incorporate the following features:

Complete stainless steel of construction for long rust free life. Corners to be rounded for easy movement and fitted with rubber bumpers to avoid any damage. These trolleys to be mounted with 4 nos. (2 swiveling & 2 Fixed type) ball bearing wheels. These trolleys should have a perforated S.S. mesh at the bottom and to be fitted with a drain valve.

Technical Specification:

Thickness	Thickness of sheet should be at least 0.8 mm or equivalent
Size	Overall size of trolley should be at least 36"Wx 24" D x 30" H.
Wheels	Castor wheels should be at least 4"dia
Drain outlet size	½" dia
Thickness of SS Mesh	Minimum 0.8 mm thickness

7. Dry Trolley

Description

• The trolley should incorporate the following features:

Complete stainless steel of construction for long rust free life. Corners to be rounded for easy movement and fitted with rubber bumpers to avoid any damage. These trolleys to be mounted with 4 nos. (2 swiveling& 2 Fixed type) ball bearing wheels. These trolleys should have a perforated S.S. mesh at the bottom and to be fitted with a drain valve.

Technical Specification:

Thickness	Thickness of sheet should be at least 0.8 mm or equivalent	
Size	Overall size of trolley should be at least 36"Wx 24" D x 30" H.	
Wheels	Castor wheels should be at least 4"dia	
Drain outlet size	½" dia	
Thickness of SS Mesh	Minimum 0.8 mm thickness	

8. Dry Trolley



Description

• High thermal and fuel efficiency, Three-pass fully wet back design cuts losses and improves efficiency, Large heating surface ensures rated evaporation capacity, Large furnace volume with sufficient grate area ensures complete combustion with efficient chimney design, Large water holding takes care of steam load fluctuations in process, High quality smoke tube design checks choking of tubes and also due to high velocity of gases, Easy maintenance and accessibility of tubes for inspection, Fusion class I welded pressure vessel, designed, constructed and inspected in accordance with Indian Boiler Regulations, 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.

Technical Specification:

Steam Generation (From & At 100 Deg. C)	1000 Kgs/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	1.45m2

Dr. C.K. Subbaraya

Registrar Adichunchanagiri University B.G.Nagara-571448