



Specification

Sl.no	Equipments	Specifications
1	Shell and tube heat Exchanger(1 No.)	<p>Water to Water. (1 – 2 shell & tube type) Shell Material Stainless steel with Insulation Dia. 220 mm, Length 500 mm (Approx.) 25% cut baffles at 100 mm distance 4 Nos. Tube: ID 13mm, OD 16mm approx., Length 500mm (24 Nos.) Water Flow Measurement: Rotameters (2Nos.) one each for cold & hot fluid. Hot Water Tank: Made of Stainless steel (with Insulation) Hot Water Circulation: Magnetic Pump Heaters: Nichrome wire heater (2 Nos.) Control panel comprising of: Digital Temp. Controller: 0-199.9°C, (For Hot Water Tank) Digital Temp. Indicator: 0-199.9°C, with multi-channel switch Temperature Sensors: RTD PT-100 type-4Nos. With Standard make On/Off switch, Mains Indicator.</p>
2	Double pipe heat exchangers(1 No.)	<p>Water to Water, concentric tube type Heat Exchanger: Length 1.6m (approx.). with insulation. Outer Tube: Material Stainless steel. ID 27.5 mm, OD 33.8 mm (approx.) Inner Tube: Material Stainless Steel, ID 9.5 mm, OD 12.7mm (approx.) Water Flow Measurement: Rotameters (2Nos.) one each for cold & hot fluid. Hot Water Tank: Made of Stainless steel (with Insulation) Hot Water Circulation: Magnetic Pump Heaters: Nichrome wire heater (2Nos) Control panel comprising of Digital Temp. Controller: PID Controller, 0-199.9°C (For Hot Water Tank) Digital Temp. Indicator: 0-199.9°C, with multi-channel switch Temperature Sensors: RTD PT-100 type- 5Nos. With Standard make On/Off switch, Mains Indicator etc.</p>
3	Heat transfer through lagged pipe(1 No.)	<p>G.I. Pipe Inner: 5 cm dia. Approx. G.I. pipe middle: 10 cm dia. Approx. G.I. Pipe outer: 15 cm dia. Approx. Length of Pipes: 60 cm Approx.</p>

		Control panel comprising of: PID Controller: 0-199.9° C Digital Temp. Indicator: 0-199.9°C, with multi-channel switch. Temperature Sensors: RTD PT-100 type-6Nos. Energy meter : Digital type for power measurement
4	Stefan Boltzmann's apparatus(1 No.)	Hemisphere: Dia.- 200 mm (approx.) made of Copper Jacket: Dia. 250 mm (approx.) made of Stainless Steel Test Disc Size: 20 mm Dia. x 1.5-mm thickness made of Copper Water Tank: Stainless steel 12 Litres. cap. Heater: Nichrome wire immersion heater. Control panel comprising of Digital Temp. Controller: 0 to 199.9°C, (for water tank) Digital Temp. Indicator: 0 to 199.9°C, with multi-channel switch Temperature sensors: RTD PT-100 type-2Nos. With standard make on/off switch, Mains Indicator.


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