HINDUSTAN PREFAB LIMITED
JANGPURA, NEW DELHI 110014

NAME OF WORK: Supplying, Installation, Testing & Commissioning of CSSD & TSSU equipment's for 150 bedded ESIC Hospital at Pandeypur, Varanasi, Uttar Pradesh.

BILL OF QUANTITY (TSSU)

Sr. No.	Equipment	Qty.	Unit	Rate	Amount
1	**Supplying, Installation, Testing & Commissioning of High Speed High Pressure Horizontal Cylindrical Steam Sterilizer.**	2	Each		
	High Speed High Pressure Horizontal Cylindrical Steam Sterilizer. Operating pressure will be 30 psi. corresponding to a temperature of 134 oC. The sterilizer will be manufactured as per "IS:3829 (Part 2) - 1978" with ISI Mark. The sterilizer chamber will be formed out of SS 316. The Jacket will be formed out of mild steel. The jacket will be insulated and covered with SS 304. The sterilizer will be provided with one pressure locking type safety door. The door plate will be formed out of SS 316 with shooting bolts, steam generator and flush mounting will be of SS 304. The sterilizer stand will be of mild steel. The Sterilizer will be automatic PLC based control system with 3 pre-sets programs to minimize human error and ease of the operator. Finally, the automation is so designed that once the program is selected then no further intervention is required from the operator till the end of the program. The sterilizer will also be provided with intelligent transducer for heater protection .				
	Sterilizer as above of chamber size 400mm dia. x 600mm depth (16" x 24") suitable for electrical operation, on 400/440 volts, 3 phase, AC supply, electrical load 18 KW. The sterilizer chamber will be formed out of SS 316. The Jacket will be formed out of mild steel. The jacket will be insulated and covered with SS 304. The sterilizer will be provided with one pressure locking type safety door. The door plate will be formed out of SS 316 with shooting bolts, steam generator and flush mounting will be of SS 304. The sterilizer stand will be of mild steel.				
2	**Supplying, Installation, Testing & Commissioning of Stainless steel Work Table**	2	Each		
	Table is used for wet goods with undershelf. The table top is fabricated out of 16 SWG SS 304 qlty. ground and polished to a smooth surface without high edge sections. The table top frame is a complete assembly with front, back and two ends welded together at corners. Overall size 915mm x600x900Ht.				
3	**Supplying, Installation, Testing & Commissioning ofS.S. Control and packing table with drawer**	1	Each		

Sr. No.	Equipment	Qty.	Unit	Rate	Amount
	table with drawer is used for separation, control and packing of various sets of sterilized goods for wards, clinics, operation theatres etc. and is designed for standing and sitting workers. A removable hatch made of laminated particles board is provided. The hatch contains a SS drawer and a laminated particles board plate. Overall size: 2000mm L x 1400mm W				
4	**Supplying, Installation, Testing & Commissioning of Stainless steel work table with two sink**	**1**	**Each**		
	The bench top is fabricated out of 16SWG SS 304 qlty. ground and polished with smooth surface and edge section. The top is designed to give a stable work surface. The table top frame is a complete assembly with front, back and two ends welded together. The sinks are made of stainless steel with inside ground and polished. Each sink is provided with a drain valve and a strainer. On the bench top, just above the sinks mixer for hot and cold water connection is provided. Overall size 1500mmL x650mm Wx900mm Ht				
5	**Supplying, Installation, Testing & Commissioning of Washer Disinfector**	**1**	**Each**		
	Single door, suitable for cleaning and disaffection of surgical instruments, anesthetic equipment, suction bottles, cleaning buckets, general circulation goods, dental tray and glassware with a fully closed process. The washer disinfector, fully automatic, has an advanced micro-processor which controls all services, programming and statistic functions. For safety reasons the service and programming functions are coded. The door would be provided with interlocking system. The chamber is equipped with four spray arms which ensure good water penetration from all directions. Various attachments are provided to suit. the load to be washed. Suitable dosage of detergent can be preset with the dosing pump. The provision of a double wall with insulation in between enables the Washer Disinfector to run with minimum sound and heat emission. The wash chamber, the inside the door, the pipework system and the circulation arms are made entirely of stainless steel.				
	Suitable for electrical operation on 400/440 volts, 3 phase, AC supply, electrical load 13 KW.Capacity of 275 ltrs.				
6	**Supplying, Installation, Testing & Commissioning of Ultrasonic Cleaner**	**1**	**Each**		

Sr. No.	Equipment	Qty.	Unit	Rate	Amount
	Ultrasonic Cleaner of overall size 530mm L x 330mm W x350mm H Internal Dimensions: 505 x 300 x 200 mm, output frequency 35khz. Capacity 30 litres. The Ultrasonic cleaners are manufactured using Solid State technology For the Ultrasonic Generator and PZT Transducers for converting the electrical energy to mechanical vibrations in the cleaning liquid. The unit will be complete with a thermostat and a timer, insert basket for tank and tank cover. The unit is suitable for electrical operation on 220/240 Volts, single phase, 50 cycles, AC supply.				
7	**Supplying, Installation, Testing & Commissioning ofDrying Cabinet with single door**	**1**	**Each**		
	Digital timer Controlled Drying Cabinet with single door suitable for easy and quick drying of instruments, utensils, glass wares and anesthetic accessories such as corrugated hoses, breathing masks, respiration bags and surgical instruments trays etc. The unit would be provided with digital display with countdown drying time and drying time selectors, temperature selector including indication of selected temperature. The system would have adjustable adjustment temperature range of 60-90oC. The system would have drying time range of 0-90 minutes. The system would take air from the work area and clean it by appropriate filter. The air is to be heated to an operator selected temperature by electric heating element. The system would also have an exhaust connection to vent outside. The unit would be provided with Cassettes and protective shelves for instruments, hoses, bladders and catheters as accessories. Chamber volume 275 litres. Suitable for electrical operation on 230 volts, single phase, 15 Amps. Electric load 3.6 KW.				
8	**Supplying, Installation, Testing & Commissioning of Hot & Cold Water Sterilizer**	**1**	**Each**		
	Hot & Cold Water Sterilizer consisting of two chambers, one for hot sterile water and the other for cold sterile water. Capacity of each chamber 40 litres. Operating pressure : 16 to 18 psi. and corresponding temperature of 121oC. The chamber will be made out of stainless steel fitted with self-sterilizing water and air filters,				
	gauge glass, double acting valve, air vent valve, draw-off valve, relief valve, safety valve, etc.. The water sterile chamber will additionally be fitted with a cooling coil for circulation of cold water. The unit is suitable for electrical operation on 400/440 volts 3 phase, 50 cycles, AC supply, electrical load 12 KW.				

Sr. No.	Equipment	Qty.	Unit	Rate	Amount
9	**Supplying, Installation, Testing & Commissioning ofStainless steel Work Table**	**1**	**Each**		
	Table is used for wet goods with undershelf. The table top is fabricated out of 16 SWG SS 304 qlty. ground and polished to a smooth surface without high edge sections. The table top frame is a complete assembly with front, back and two ends welded together at corners. Overall size 900 x 600 x 900 mm H.				
10	**Supplying, Installation, Testing & Commissioning ofStainless steel racks with 5 shelves**	**6**	**Each**		
	all sides open and stainless steel bullet feet. overall size 1830x535x1830mmH.				
11	**Supplying, Installation, Testing & Commissioning ofSPRAY GUN RINSER FOR WATER**	**1**	**Each**		
	SPRAY GUN Rinser with 8 attachments is used for				
	cleaning springs, catheters, endoscopes,cysto-				
	scopes and variety of other instruments and articles				
	used in sterile services.				
12	**Supplying, Installation, Testing & Commissioning ofSPRAY GUN RINSER FOR AIR**	**1**	**Each**		
	SPRAY GUN Rinser with 8 attachments is used for				
	cleaning springs, catheters, endoscopes,cysto-				
	scopes and variety of other instruments and articles				
	used in sterile services.				
	TOTAL AMOUNT				

NOTE :

1 The quoted rates of the bidders will be inclusive of all the taxes including GST, Transportation, Loading & Unloading, Installation, Testing & Comissioning of the equipments in all respect. Nothing extra will be payable on any account. For Testing & Commissioning of equipments, arrangement of water & electricity will be made by the contractor at his own.

2 All the equipments should confirm to the technical specifications given in the tender document. However, if any of the specifications is missing or not given in the tender document, the equipment should confirm to the best specifications of the trade & equipment duly approved by the Engineer-in-Charge.