

## EQUIPMENT SPECIFICATIONS

ID #	Qty	Item Description	Bid Category	Unit Cost	Extended Cost
0764659	2	STERILIZER, FLOOR LOADING	15	150,000.00	300,000.00

**Memo:** Chamber dimensions (wxdxh) 26.5x42x62" (672x1067x1575mm). 39.6 cu.ft. House steam. Pit mounted and recessed through one wall. Single right-hand hinged opening, powered door. Vacuum/gravity. Gravity/downward displacement w/positive pulse conditioning and ressure vacuum pulsing for air removal.

Microcomputer controls: control panel mounted vertically next to door. Panel includes operator interface panel, thermal printer, mechanical and jacket pressure gauges, status indicators, active touch sensitive switches and on/off switch. Key lock provided to ensure all door power is disconnected when entering the chamber. 20 MHz microprocessor as dedicated controller with 8Mb Ram. Screen saver on back lit Lcd. Push button switches for door seal/unseal and cycle start. Audible and visual operator feedback provided when selection made or fault message displayed. Temperature can be set, controlled and displayed in Celsius or Fahrenheit and pressure in Psia, Bar or Kpa. Temperature of discharge water controlled by temperature device to be less than 140 deg F (60 deg C). Chamber drain is continuously monitored for presence of water during a cycle. If water detected and cannot be automatically corrected, "water in drain" alarm alerts operator.

Cycle documentation: 200-dpi dot matrix printer. Thermal paper printer prints cycle performance at completion of each cycle. Last cycle reprint capabilities. Printer documents: process start time and date, sterilizer name & number, and total cycle count; Cycle selected w/time & temperature, w/other adjustable parameters identified; Parameter check provides an estimated numeric process lethality; Cycle phase transition points, temperature, pressure and cycle time; Process fault information messages with time of occurrence; Summary verification of time at selected temperature; End of cycle message with real time documented; Cycle verification signature line.

Operator panel: top section-time, temperature selected and type of cycle selected. Middle section-choice of 3 screens to view actual, real time cycle information. Plot graph or bar graph display. Cycle parameters are password protected. Lower section-text alarm messages and non-critical system messages. Screens are navigated by use of soft keys, directional arrows to move cursor and change values.

Cycles: up to 14 factory recommended cycles available. 3 gravity cycles 30 minutes exposure at 250 deg F (121 deg C) w/30 minute dry time, 3 gravity cycles 10 minutes exposure at 275 deg F (135 deg C) w/30 minutes dry time, 6 vacuum cycles of 3 minutes at 275 deg F (135 deg C) w/16 minutes minimum dry time for mixed loads of wrapped instruments and linen, 1 bowie-dick cycle 3.5 minutes at 273 deg F (134 deg C) w/zero dry time and 1 vacuum leak test cycle run at 268 deg F (131 deg C).

Performance: during timed exposure phase temperature controlled by chamber sensor at 0.9 deg F (0.5 deg C) above the set point (+/-0.2 deg C). Temperature selectivity is in 0.1 deg F (0.1 deg C) increments. Timing functions are selectable in one-second increments and accuracy is within 0.04%. Temperature controlled by time proportioning continuous algorithm. Battery with 10 year life holds programmed cycle values in memory. In the event of power interruption, current cycle status is available for up to 1 minute.

Cycle progression: gravity/wrapped goods (pressure pulse preconditioning)-conditioning, heat up, exposure, exhaust, dry and cycle complete. Prevac/wrapped goods (vacuum/pressure pulsing preconditioning)-conditioning, heat up, exposure, exhaust, dry and cycle complete.

Construction: chamber constructed of inner shell reinforced by a series of "u" channels that form outer jacket of chamber. Gasket ring and backhead are formed and welded to chamber body. Chamber and door material: 6mm (0.236") thick stainless steel, type Sa240 gr. 316Ti. Jacket: 316Ti. Interior chamber high luster polished finish. All pressure vessel construction meets asme code requirements for working pressures up to 45 Psig (310 Kpa). Gasket ring holds continuous, one-piece silicone gasket, 0.787" (20mm) in diameter. Body assembly thermally insulated with 1.5" fiberglass insulation and double thick between jacket "u" channels. Steam baffle prevents condensation from wetting load. Manual gasket retract valve provided for emergency chamber access.

**EQUIPMENT SPECIFICATIONS**

ID #	Qty	Item Description	Bid Category	Unit Cost	Extended Cost
------	-----	------------------	--------------	-----------	---------------

Door: right hand hinged, electric motor powered door. Fiberglass insulation covered w/stainless steel panel. Two step opening. Door pivots up to clear door locking pins, then swings open. Door will stop automatically if an obstruction is encountered. In an emergency door can be opened by qualified technician. Door sealing is positive and consistent. Recessed gasket. Once cycle begins and chamber is pressurized door cannot be opened. Safety switch prevent steam from entering the chamber.

Architectural:	Placement	wxdxh (in)	wxdxh (mm)	sq ft	sq m	lb	kg
	f	59.00 x 57.00 x 95.00	1499 x 1448 x 2413	0.0	0.0	2,880.0	1,307.5

Service clearance: 4" (102 mm) clearance for door swing of control panel. 36" clearance for door swing. Access to service areas (both sides to be supplied by others access door to be no less than 18" wide by 80" high.

Shipped completely assembled. On skid, minimum door size required for unit pass through is (wxh) 83x99". With skid removed, minimum door size required for unit pass through is (wxh) 59x90".

Electrical: Power box 0.5" conduit. 115V, 50/60 Hz, 12 Amp. 1 phase. 15 Amp breaker/fuse recommended. 7 W/hr consumption. Fused disconnect switches or circuit breakers required at sterilizer site by others.

HVAC: Control area: 6233 BTU/hr. Recess area: 10713 BTU/hr. Operating environmental conditions: temperature 10 degrees C to 40 degrees C (50 to 104 degrees F). Relative humidity: 10 to 90% non-condensing.

Plumbing: Building service lines, provided by others, must supply the specified pressures and flow rates. Shut-off valves are required at sterilizer site in steam and water supply lines provided by others.

Steam: 1" Npt female connection. 1.25" Npt pipe size to unit (Psu). Dynamic 50-70 Psig. Maximum flow rate (MFR): 300 Lbs/hr (136 Kg/hr). Condensate free between 97-100% saturated vapour to be provided by others.

Cold water: 1.25" Npt female connection. 1.25" Npt Psu. Dynamic 40-70 Psig. Mfr: 11 Gpm (42 Lpm). Potable water with hardness of 0.5-10 grains/gal (8-170 ppm)

Air: 0.5" Fpt. 0.5" Npt Psu. Dynamic 50-90 Psig. Mfr: 1 Scfm.

Drain: 3" Npt female connection. 3" Npt pit drain with 9x9" (229x229mm) strainer fitting flush with pit floor.

Safety valve vent: 1" Npt female. To be connected to a vented manifold outside the equipment service area.

Structural: Unit recessed in wall. Wall opening to be (wxh) 54x93.5" (1372x2362 mm). Single right-hand door opening. 36" (914 mm) clearance from finished wall required for opening of door. Left-hand piping.

Pit mounted to be (wxd) 54x57" (1372x1448 mm) and 9 7/8" (251 mm) B.F.F. Sloping towards drains. 12 1/8" (308 mm) from finished wall into work area.

Sterilizer waste drain 3" (76 mm) npt female (coupling) flush with floor.

Pit drain 3" (76 mm) npt with 9x9" (229x229 mm) strainer fitting flush with floor. Viewing from work area, located 43 5/8" (1108 mm).

Const #	PC	FC	FE	CC	Qty	Arch Rm #	Prgm Rm #	Rm Name	Department	Building	Site
D					2	B0-222	B0-222	STERILIZER SERVICE AREA	CENTRAL STERILE PROCESSING	DEFA	DEFA