

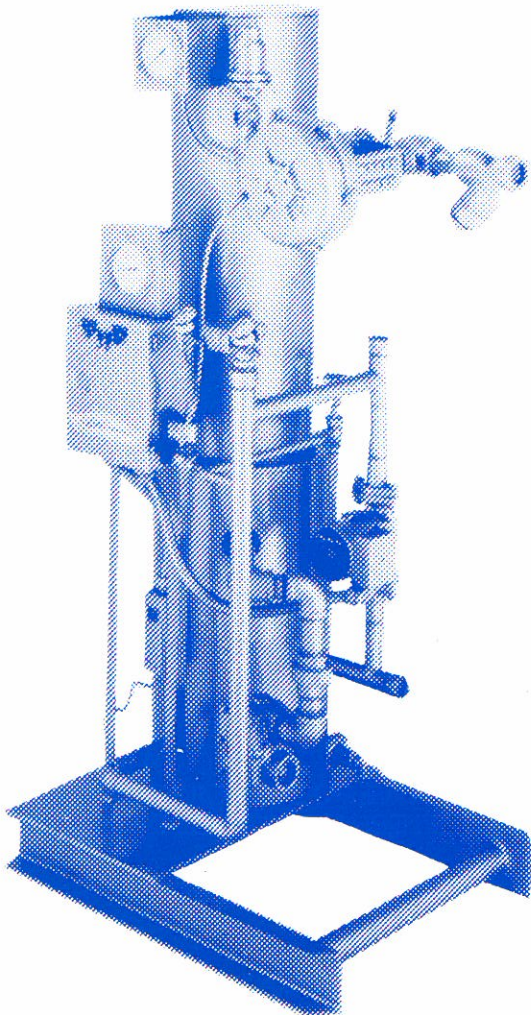
HEAT ENERGY SYSTEMS

SEMI-INSTANTANEOUS STEAM WATER HEATERS

ENERGY EFFICIENCY: ASHRAE 90A-1980

With energy costs continuing to rise, energy consuming equipment must be made as efficient as possible. This is especially important because new and more stringent conservation and efficiency standards are being proposed and adopted regularly.

The principal heat losses, which reduce overall efficiency, are radiant losses from the pressure vessel and its flanges. At the factory, we insulate each tank and enclose it with a steel jacket to reduce these radiant losses to less than 4 watts per square foot of tank surface.



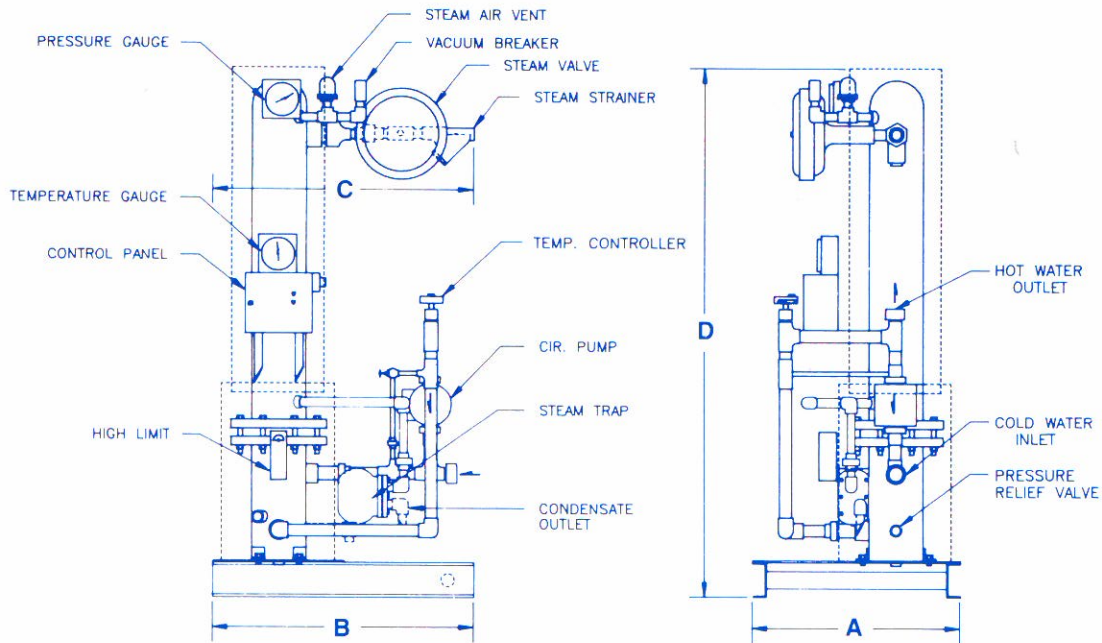
STANDARD EQUIPMENT

- Modulating Steam Valve With Strainer
- Pneumatic Temperature Controller
- Temperature Demand Anticipator Assembly
- Temperature Gauge
- Steam Pressure Gauge
- ASME Certified T & P Relief Valve
- 2" Insulation With Metal Jacket
- Junction Box With On-Off Switch
- (2) Two Indicator Lights
- "Y" Strainer
- Vacuum Breaker
- Condensate Trap
- High Limit Temperature Control
- Safety Solenoid Control Circuit
- Bronze Circulation Pump With Copper Pipe
- Copper Tube-Heat Exchanger
- Stainless Steel Tubesheet
- Stainless Steel Mixing Chamber
- ASME Stamped 150 PSI W.P.
- National Board Registered
- Skid Type Base
- 5 Year Non-Prorated Warranty

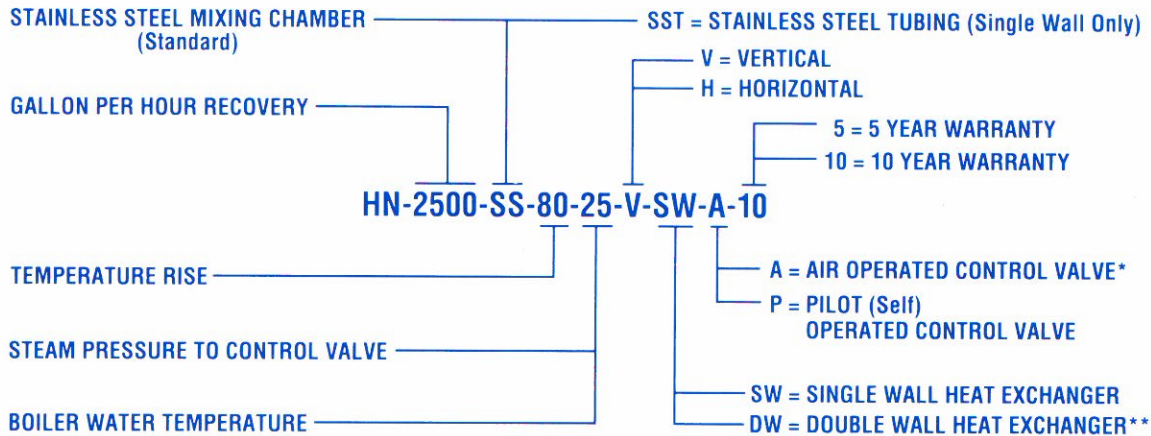
OPTIONAL EQUIPMENT

- Double Wall Heat Exchanger (Copper)
- Stainless Steel Tube-Heat Exchanger
- Pilot (Self) Operated Control Valve
- Condensate Lift Pump
- Vertical Base Extension (See Page 4)
- Double Solenoid Safety
- 10 Year Non Prorated Warranty

VERTICAL

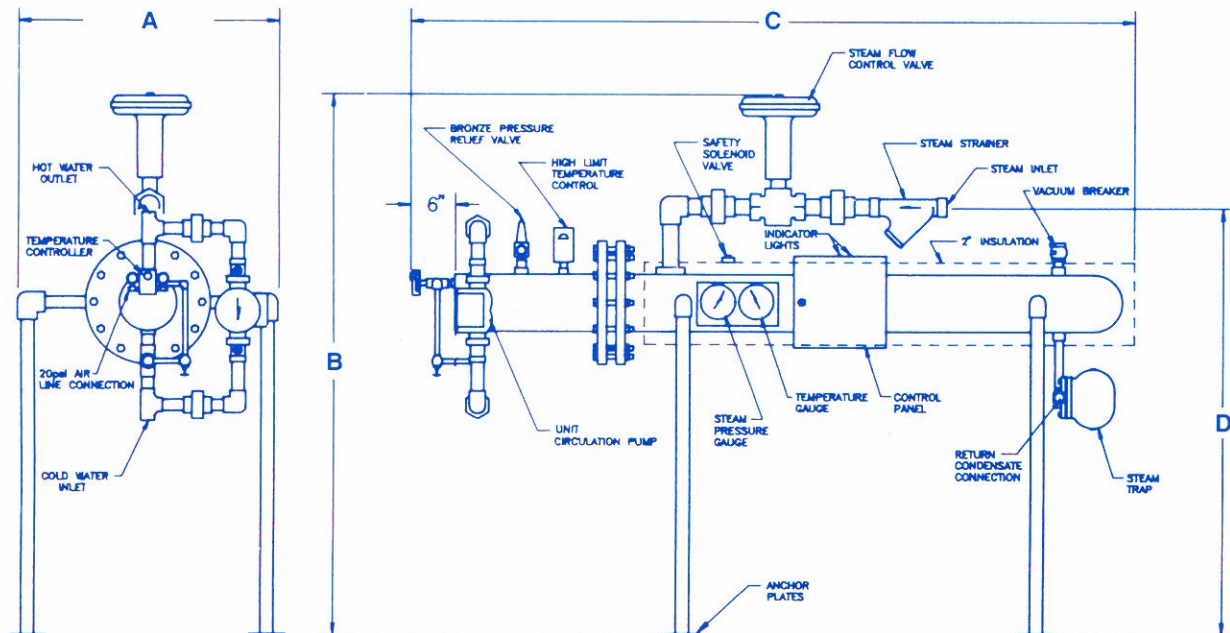


MODEL NUMBER SELECTION:



* REQUIRES 20 PSI AIR PRESSURE
 **DOUBLE WALL MAY BE REQUIRED IN STATES USING BOCA CODE

HORIZONTAL



CLEARANCE: ALLOW $\frac{3}{4}$ OF "C" DIMENSION FOR TUBE PULL ON HORIZONTAL UNITS.

VERTICAL

GPM 40-120	GPM 40-140	Maximum Dimensions — Inches				Water Connection	Shipping Weight
		A	B	C	D		
35	22	24	30	44	74	1½	500
60	40	24	36	51	74	2	700
80	65	24	48	63	74	2½	1000
150	95	24	48	67	74	4	1300

- All Units Require 115/1/60 Electrical Connection For Pump.
- Water Pressure Drop Thru Heater Does Not Exceed 3 PSI.
- Consult Factory For Glycol, Double Wall Or Other Temperature Selections.
- Cap GPM = Capacity In U.S. Gallons Per Minute. Multiply By 3.8 For Liters Per Minute.
- Steam Assembly May Project Over Base Where Dimension "C" Exceeds Dimension "B".
- Openings 4" And Larger Are 150 PSI Flanged.
- All Dimensions Are In Inches.
- Condensate Trap Size Does Not Determine The Condensate Return Line Size! Consult With Project Engineer For Proper Line Size.
- Do Not Lift Condensate!!

HORIZONTAL

GPM 40-120	GPM 40-140	Maximum Dimensions — Inches				Water Connection	Shipping Weight
		A	B	C	D		
55	33	30	64	115	46	2	500
100	62	30	72	115	53	3	800
175	109	40	82	116	54	4	1200
258	160	40	83	127	55	4	1600

NOTE: Above maximum dimensions are based on 15 PSI steam to the control valve. If these dimensions are too large for your space, consult with Hesco for exact dimensions for your project.

CALCULATING STEAM REQUIREMENTS

Pounds of Steam Per Hour Required = $\frac{\text{Gal/Hr. Water} \times 8.3 \times \text{Temp. Rise}}{\text{Latent Heat of Steam}}$

Gallons of Condensate Per Hr. Produced = $\frac{\text{Pounds Per Hr. of Steam}}{8.33}$

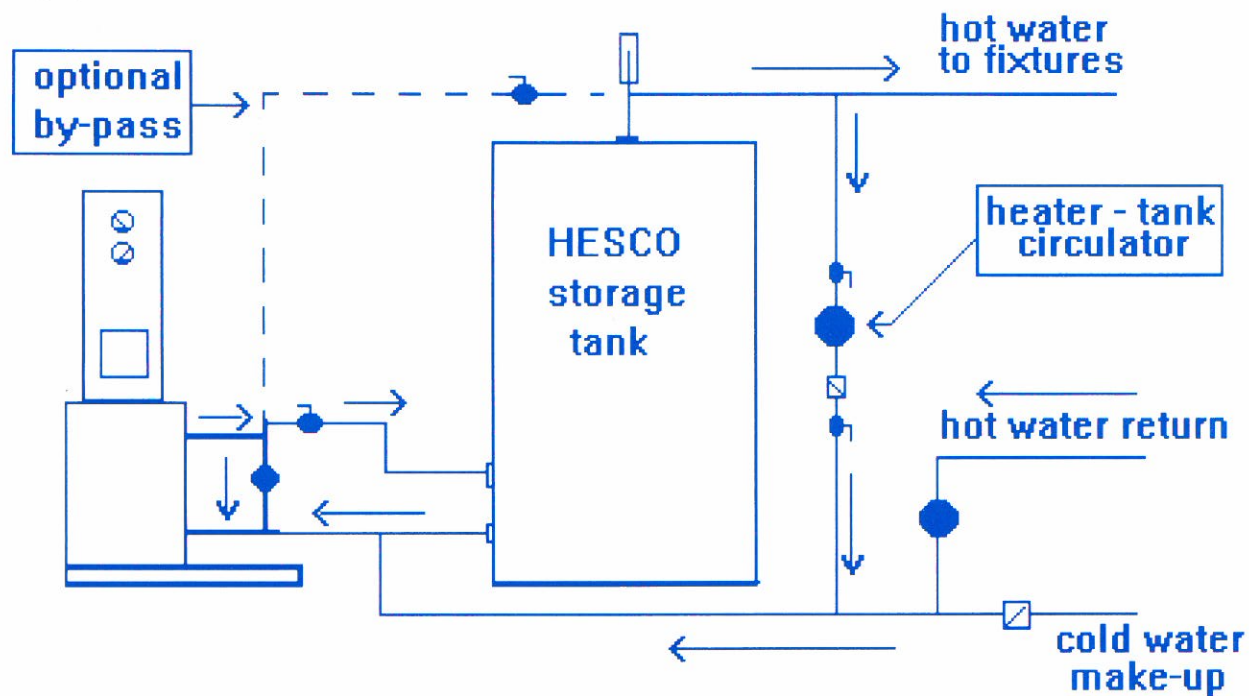
LATENT HEAT OF STEAM

Gauge Pressure	2#	5#	10#	15#	25#	50#	75#	100#
B.T.U. Per Pound	966	960	952	945	933	911	893	881

The Horsepower required can be roughly approximated by dividing pounds of steam per hour by 30.

NOTE: *Vertical Base Extension is available in any height when it is necessary to raise the level of the condensate connection. The height of the extension must be added to the overall height of the heater.

PIPING WITH STORAGE TANK



NOTE: PUMPS TO RUN CONTINUOUSLY.
CUT OFF VALVES, UNIONS OR OTHER FITTINGS TO BE
SELECTED AND LOCATED BY PROJECT ENGINEER.

FORM # WTK-1-1295

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