

### **HEAT ENERGY SYSTEMS**

# 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.

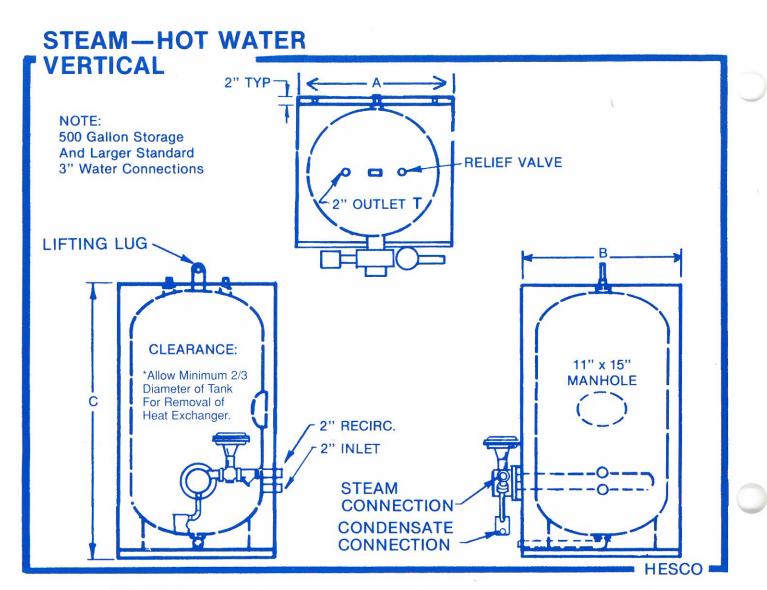


### STANDARD EQUIPMENT

- Polymerized Epoxy Tank Lining
- 16 Gauge Enamel Steel Jacket
- Heavy Density Fiberglass Insulation
- 11 x 15 Manway
- Lifting Lugs
- Structural Steel Base
- 3/4" OD Copper Heat Exchanger 18 B.W.G.
- Non-Ferrous Tube Sheet
- Non-Ferrous Supports (when applicable)
- Steam Y Strainer
- Self Operating Steam Control Valve & Sensor
- Float & Thermostatic Trap
- ASME Stamped-125 PSI Working Pressure
- National Board Stamped
- Blow Down Drain Valve Connection
- ASME Rated Temperature & Pressure Relief Valve

## **OPTIONAL EQUIPMENT**

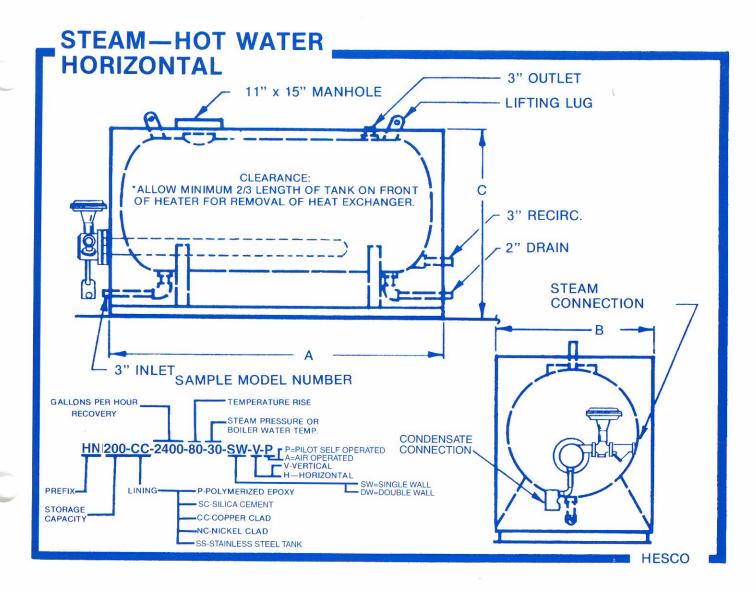
- COPPER CLAD™ Tank Lining
- Silica Cement Lined Tank
- Solid Stainless Steel
- Glasslined Tank (30" Diameter Max.)
- Pneumatic Steam Control Valve
- Steam Pressure Gauge
- Tank Temperature Gauge
- Tank Pressure Gauge
- Automatic Reset Expansion Control
- Intra Tank Circulator
- Flanged Tank Connections
- Hot Water Energy Source
- Double Wall Heat Exchanger



## **DIMENSIONS & RECOMMENDED MINIMUM CLEARANCES**

MODEL NUMBER	WIDTH DEPTH		HEIGHT	VESSEL	SHIPPING	WGT.	
GAL. STORAGES	A	В	C	DIA	APPROX. CEMENT	LBS. STD.	
HN150 V	34"	34"	58"	30"	1550	1250	
HN200 V	34"	34"	75"	30"	1800	1400	
HN250 V	40"	40"	68"	36"	2025	1525	
HN300 V	40"	40"	78"	36"	2300	1525	
HN350 V	40"	40"	90"	36"	2300	1525	
HN400V	46"	46"	78"	42"	2800	2000	
HN500 V	46"	46"	94"	42"	3000	2400	
HN600 V	52"	52"	89"	48"	3600	3000	
HN750 V	52"	52"	106"	48"	4120	3370	
HN1000 V	64"	64"	95"	60"	5725	4600	

<sup>\*</sup>DIAMETER AND LENGTH OF HEAT EXCHANGER IS DETERMINED BY POUNDS OF STEAM AVAILABLE, RECOVERY AND TEMPERATURE RISE. IF SPACE IS CRITICAL, PLEASE CONTACT HESCO FOR EXACT CLEARANCE REQUIRED.



### **DIMENSIONS & RECOMMENDED MINIMUM CLEARANCES**

MODEL NUMBER GAL. STORAGES	LENGTH	WIDTH	HEIGHT	VESSEL DIA	SHIPPING APPROX.	WGT. LBS. STD.	
GAL. STORAGES	Α	В	C	DIA	CEMENT		
HN500H	94"	46"	56"	42"	3000	2400	
HN750H	106"	52"	62"	48"	4160	3460	
HN1000H	141"	52"	62"	48"	4160	3460	
HN1250H	173"	52"	62"	48"	6100	5000	
HN1500H	168"	58"	68"	54"	7200	6000	
HN1750H	194"	58"	68"	54"	8300	7000	
HN2000H	177"	64"	70"	60"	9700	8300	
HN2250H	177"	64"	70"	60"	9700	8300	
HN2500H	219"	64"	70"	60"	11400	9600	

DIMENSIONS, LOCATION OF OPENINGS, STORAGE CAPACITY ON THIS SPECIFICATION SHEET ARE TO SIMPLIFY THE SELECTION OF EQUIPMENT; LARGER OR SMALLER SIZES ARE AVAILABLE UPON REQUEST. PLEASE CONTACT YOUR HESCO REPRESENTATIVE FOR SPECIFIC INFORMATION.

## RECOVERY CHART MAXIMUM RECOVERY PER TANK CAPACITY

BASED ON 40 TO 140 DEGREES F. TEMP. RISE (FOR 40 TO 120 DEGREES F-MULTIPLY BY 1.25)

	Storage	STEAM PRESSURE (PSIG)**										
	CAPACITY	0 *	2	5	10	15	20	25	35	50	75	100
	HN 150 V	900	960	1030	1110	1210	1300	1350	1450	1500	1600	1750
V	HN 200 V	900	960	1030	1110	1210	1300	1350	1450	1500	1600	1750
E	HN 250 V	1800	1900	2060	2220	2420	2600	2700	2900	3000	3200	3500
R	HN 300 V	1800	1900	2060	2220	2420	2600	2700	2900	3000	3200	3500
Ţ	HN 350 V	1800	1900	2060	2220	2420	2600	2700	2900	3000	3200	3500
	HN 400 V	2200	2300	2470	2670	2900	3150	3250	3500	3600	3850	4200
C	HN 500 V	2200	2300	2470	2670	2900	3150	3250	3500	3600	3850	4200
A	HN 600 V	2700	2880	3100	3350	3650	3900	4050	4350	4500	4800	5250
L	HN 750 V	2700	2880	3100	3350	3650	3900	4050	4350	4500	4800	5250
	HN 1000 V	2800	2900	4100	4400	4800	5200	5400	5800	6000	6500	7000
Н												
0	HN 500 H	2800	2900	4100	4400	4800	5200	5400	5800	6000	6500	7000
R	HN 750 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000
	HN1000 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000
Ż	HN1250 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000
0	HN1500 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000
N	HN1750 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000
T	HN2000 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000
	HN2250 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000
A	HN2500 H	2800	3000	4800	6700	7300	7800	8100	8700	9000	9600	10000

\*FOR HOT WATER ENERGY SOURCE USE "O" PSI ON ABOVE CHART \*\*BEFORE THE STEAM CONTROL VALVE

### **TANK LININGS**

COPPER CLAD

Recommended for maximum tank life. Undoubtedly the finest tank lining available in the industry today. After the tank is completely fabricated from first quality ASME grade steel, the entire tank interior is lined with pure molten copper which serves to protect the tank from corrosion under all types and temperatures of potable water. The copper lining is then coated with two separate applications of Polymerized Epoxy coating, which is force cured, and may be field repaired should the lining ever become damaged. This coverage at a thickness of 10-12 mils (dry film), offers added protection against corrosion and allows smooth tank surfaces to prevent build-up of algae and precipitants on the interior tank surfaces. This lining material meets the requirements of the EPA, USDA, and FDA.

#### POLYMERIZED EPOXY

A high water resistant Polymerized Epoxy material. After the tank is completely fabricated from first quality ASME grade steel, the entire tank interior is lined with two separate applications of Polymerized Epoxy coating, which is force cured, and may be field repaired should the lining ever become damaged. This coverage, at a thickness of 10-12 mils (dry film), offers protection against corrosion and allows smooth tank surfaces to prevent build-up of algae and precipitants on the interior tank surfaces. This lining material meets the requirements of the EPA, USDA, and FDA.

#### SILICATE CEMENT

A competitively priced lining that offers excellent coverage of the interior tank surface. It is applied at a minimum thickness of 5/8". It is equal or superior to other cement linings available throughout the industry. As in the case of the other cement linings, it requires annual inspection to fulfill warranty requirements. In most cases, periodic maintenance is necessary due to errosion of the lining caused by the flow of hot water over it's surfaces.

### NICKEL CLAD

All of the exacting procedures used to Copper Clad the tank are used in the application of Nickel Clad linings. For use where Nickel is required to meet the job specifications.

#### **SOLID STAINLESS STEEL**

Available in 304, 316 stainless steel, depending upon the needs of the application. For use with de-ionized reverse osmosis, distilled water, and chemical solutions. Consult the factory for applications.

**HESCO INDUSTRIES INC.** 

PHONE 615-242-7600

513-D LIGON DRIVE

**NASHVILLE, TENNESSEE 37204**