Heat Recovery System

- Condensate Heat Recovery
- Continuous Boiler Blow Down
- Vent Condenser

Condensate or Boiler Blow Down contains energy that can be recovered and used to preheat domestic hot water, boiler feed water, or heat a separate fluid while cooling the condensate before it is dumped down the drain or returned to the boiler.

The Cemline Heat Recovery System (HRS) works by receiving condensate or boiler blow down into the flash tank. The flash tank separates the flash steam from the condensate or boiler blow down effluent. The liquid level in the tank is controlled by the float and thermostatic trap discharging condensate from the F&T trap to the heat exchanger to cool and recover energy from the condensate before it is dumped down the drain or returned to the boiler.

The HRS can be optionally supplied with a vent condenser to recover flash steam. Reducing the pressure of saturated condensate will cause a portion of the liquid to flash to low-pressure steam. The flash steam may contain approximately 10-40% of the energy content of the original condensate depending upon the pressures. Most often a flash tank is used to reduce the condensate pressure whereby the flash steam is vented and the energy content is lost. This lost energy can be recovered by piping a heat exchanger in the vent of the flash tank.

The Cemline Heat Recovery System includes a flash tank, float & thermostatic trap and a condensate recovery heat exchanger. The flash tank is ASME constructed and stamped for 150 PSI working pressure.

STANDARD EQUIPMENT

Flash tank
ASME Code Constructed National Board Registered - Rated for 150 psi

Condensate Energy Recovery Heat Exchanger
Plate Heat Exchanger (Brazed Plate or Plate & Frame Style)
- Single or Double wall

Float and Thermostatic Trap

Isolation Ball Valve

ASME Pressure Relief Valve

Pressure Gauge

Drain Valve

Structural Support Skid

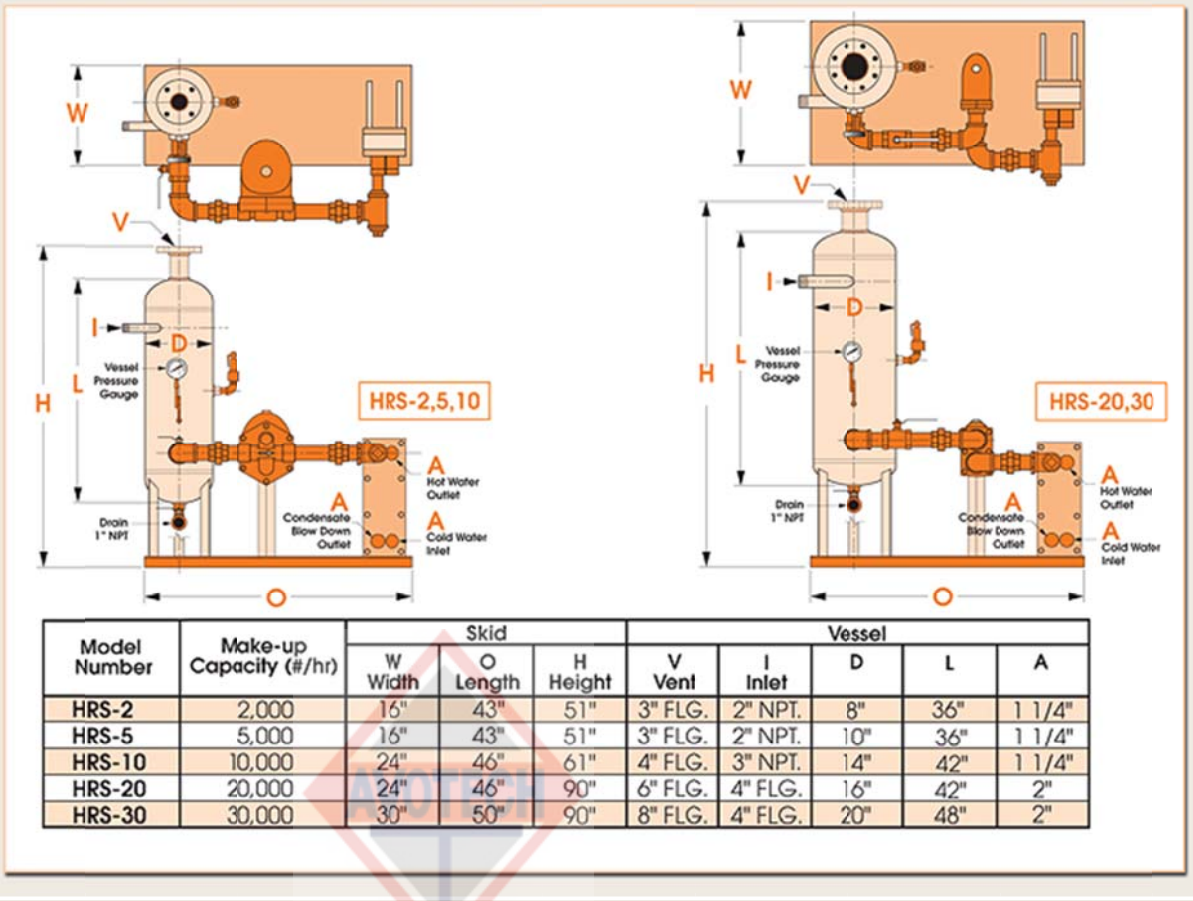
OPTIONAL EQUIPMENT

Vent Condenser
- Shell & Tube Heat Exchanger
- ASME Code Constructed National Board Registered
- Rated for 150 psi
- Tubing Options
  - Double Wall tubing
  - 90:10 Copper-Nickel tubing
  - Stainless steel tubing
- Stainless steel coil head
- Stainless steel shell

Condensate Energy Recovery Heat Exchanger
Shell & Tube Heat Exchanger

Sight Glass

DIMENSIONAL DATA



Model Number	Make-up Capacity (#/hr)	Skid			Vessel				
		W Width	O Length	H Height	V Vent	I Inlet	D	L	A
HRS-2	2,000	16"	43"	51"	3" FLG.	2" NPT.	8"	36"	1 1/4"
HRS-5	5,000	16"	43"	51"	3" FLG.	2" NPT.	10"	36"	1 1/4"
HRS-10	10,000	24"	46"	61"	4" FLG.	3" NPT.	14"	42"	1 1/4"
HRS-20	20,000	24"	46"	90"	6" FLG.	4" FLG.	16"	42"	2"
HRS-30	30,000	30"	50"	90"	8" FLG.	4" FLG.	20"	48"	2"

Catalogue – Click here