Gas
Liquid & Slurry
Solid & Powder
Steam & Water

SENTRY XC BOILER BLOWDOWN SYSTEM

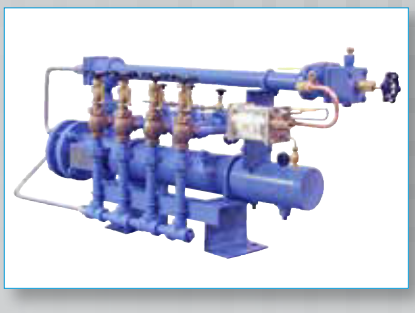
Heat Exchangers

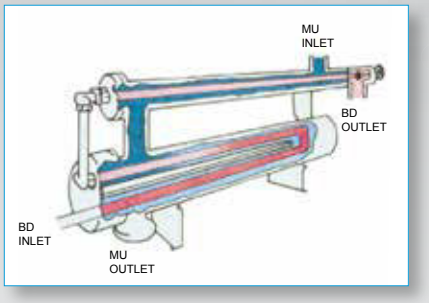
SAMPLE CONDITIONING

The Sentry® XC blowdown system provides the best performance of any boiler heat recovery product available.

During operation, the automatic proportional control valve uses a direct-acting thermostatic tube working against an adjustable seat. The (cold) makeup water flows between the inner and outer tubes, automatically regulating blowdown to be concurrent with and proportional to makeup flow. It also virtually ensures that no blowdown occurs without proportional makeup flow. The (warm) blowdown water flows through the inner thermostatic tube.

The efficient counterflow heat exchanger comes completely piped as part of the system. The stainless steel tube bundle is specifically designed to withstand thermal shock, water hammer, abrasive materials and high water velocities. All units are ASME stamped.





MODELS

X43-C	X46-C	X66-CL	X69-CL	X89-CK
X43-CM2	X46-CM2	X66-CLM2	X69-CLM2	X89-CKM2
X43-CM3	X46-CM3	X66-CLM3	X69-CLM3	X89-CKM3
	X46-CM4	X66-CLM4	X69-CLM4	X89-CKM4
		X66-CLM5	X69-CLM5	X89-CKM5
				X89-CKM6

BENEFITS

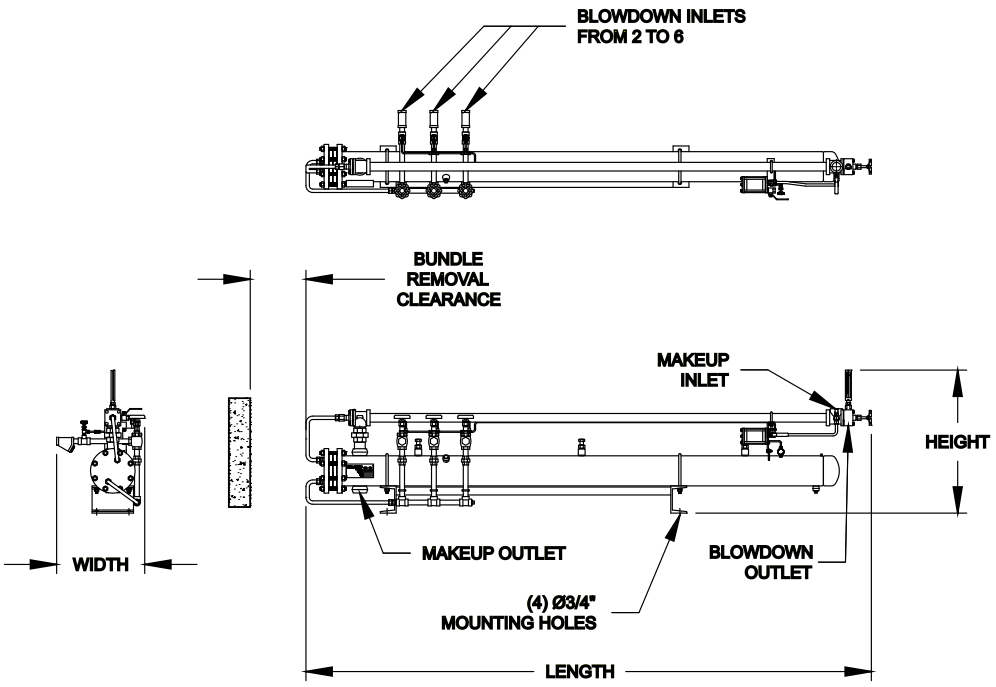
The XC blowdown system is specifically designed to eliminate the twin hazards of blowdown systems: flash steam, which destroys heat exchangers, valves and piping, and overheated makeup, which scales the heat exchanger and liberates dissolved gases that corrode the exchanger, piping and deaerator inlet.

All systems are completely pre-piped for a broad range of boiler capacities, and installation is simple.

FEATURES

- One to six boilers in the same recovery unit
- Typically recovers 90% of heat lost during blowdown
- Quick payback in energy savings
- Boiler pressure ratings from 35 to 250 psig (2.4 to 17.2 barg) for a broad range of boiler capacities

Sample. Monitor. Measure.
SENTRY
Any Application. Anywhere.



		NOMINAL OVERALL DIMENSIONS (INCHES)				CONNECTION TYPE/SIZE (INCHES)			
MODEL	MAXIMUM NUMBER OF BOILERS	LENGTH	WIDTH	HEIGHT	BUNDLE REMOVAL CLEARANCE REQUIRED	MAKEUP INLET	MAKEUP OUTLET	BLOWDOWN INLET	BLOWDOWN OUTLET
X43-CM	3	53	18 1/2	29	30	1 1/2 FNPT	1 1/2 FNPT	3/4 FNPT	3/4 FNPT
X46-CM	4	80	18 1/2	29	66	1 1/2 FNPT	1 1/2 FNPT	3/4 FNPT	3/4 FNPT
X66-CLM	5	82 1/2	19 1/2	31 1/2	66	2 FNPT	2 FNPT	3/4 FNPT	3/4 FNPT
X69-CLM	5	125 1/2	19 1/2	31 1/2	102	2 FNPT	2 FNPT	3/4 FNPT	3/4 FNPT
X89-CKM	6	126	18	37	102	3" - 300# FLANGE	3 FNPT	3/4 FNPT	1 FNPT

SPECIFICATIONS

automatic proportional control valve	brass thermostatic tube; steel and ductile iron outer shell and connections; heat treated stainless steel seat and plunger; blowdown outlet thermometer; manually adjustable set point range for makeup/blowdown ratios of 3/1 to 50/1
sample cooler	counterflow Sentry TRB4222 to discharge blowdown sample at maximum of 120°F (49°C); tube side is stainless steel, rated at 2000 psi/850°F (138 bar/454°C); shell side is stainless steel, rated at 250 psi/450°F (17.2 bar/232°C) shell can be removed without disconnecting piping; cooler is equipped with isolation valves and inter-connecting piping
counterflow heat exchanger	removable U-tube bundle; 19 ga. 304 stainless steel tubes; U-bends 1.5 times thicker than tubes; rear supporting baffle, steel shell side with anti-vibration hold-down clamps; ASME Boiler and Pressure Vessel Code stamping for 250 psig/400°F (17.2 bar/204°C) rating; interconnecting piping of steel and stainless steel; supporting stands of steel
balancing valves	bronze 300 psi (21 bar) v-port with one bronze 250 psi (17.2 bar) strainer per valve for each boiler
dimensions	see above chart
finish	blue polyurethane enamel

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