



SHIPPENSBURG PUMP CO. INC.

P.O. BOX 279, SHIPPENSBURG, PA 17257

PH 717-532-7321 • FAX 717-532-7704

WWW.SHIPCOPUMPS.COM

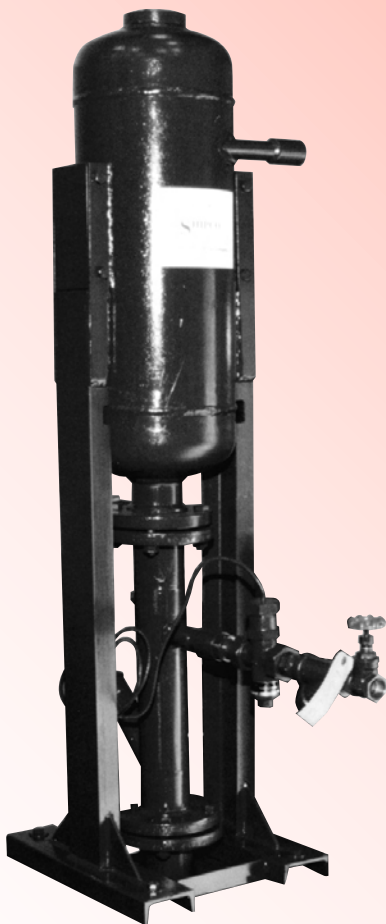
Pride

Quality

Craftsmanship

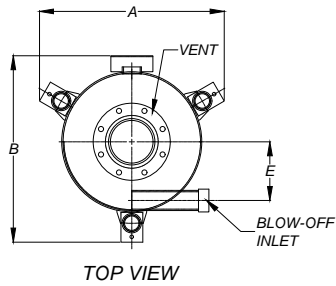
BULLETIN 159

Revised 12/16

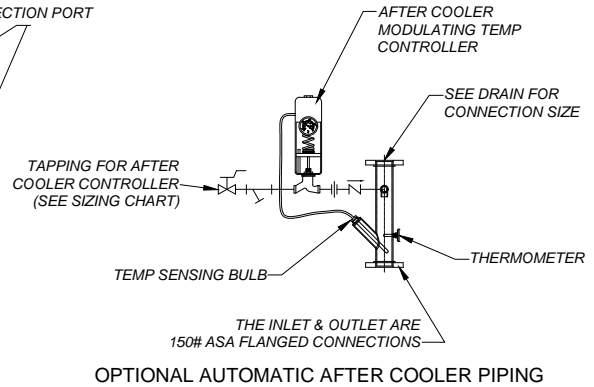
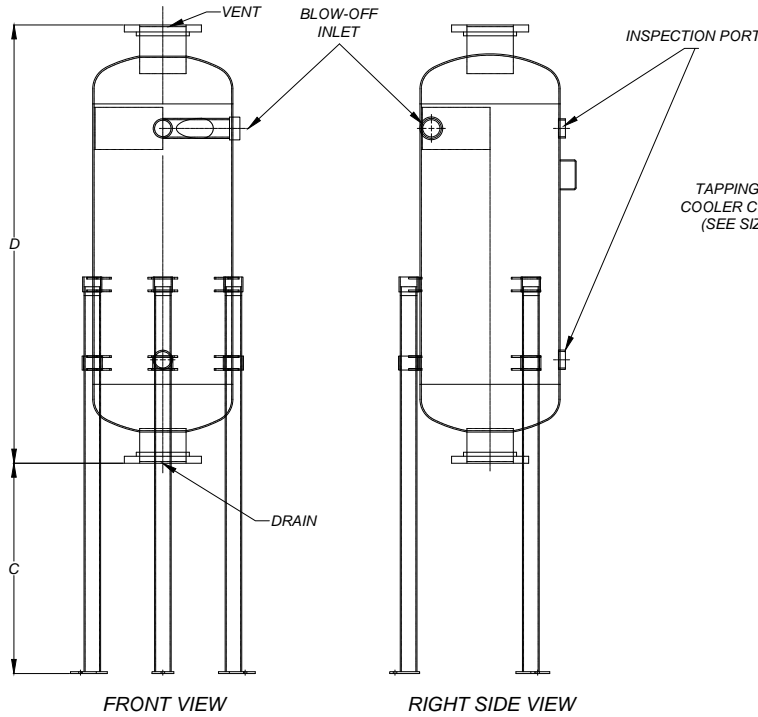


TYPE BDS
BLOW-DOWN SEPARATORS

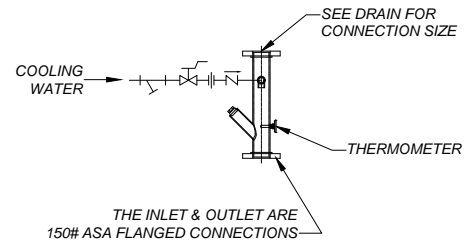
- ASME Code Stamped 150 PSI
- National Board Stamped
- Stainless Steel Wear Plate
- All Seams and Joints Hydrostatically Tested
- Constructed of Heavy Duty Steel
- Optional After Cooler Section Available
- Threaded or Flanged Openings
- External Venting to a Maximum of 5 PSI
- Tangential Inlet Tapping



- Boiler Blow-Off size and operating pressure determines Blow Down Separator sizing.
- The ASME design pressure of the Blow Down Separator should equal a minimum 25% of the boiler operating pressure.
- Selection based on matching your operating pressure and bottom Blow Down valve size. The largest valve size and highest pressure should be used for multiple boilers.
- If boiler pressure is greater than listed operating size, go to next line. If boiler pressure exceeds chart consult factory.
- All optional Aftercooler for cooling blowdown discharge that is entering public sewers and waters. Temperatures set at 140 deg. as standard.
- Representative's responsibility when ordering to meet appropriate local, state or insurance codes.
- Fittings threaded or 150# flanged as standard (300# flanges optional).
- Vessels ASME code stamped for 150 PSIG (consult factory for higher pressure ratings).



OPTIONAL AUTOMATIC AFTER COOLER PIPING



OPTIONAL MANUAL AFTER COOLER PIPING

ALL DIMENSIONS ARE APPROXIMATE

Model	Separator Size	Blow-Off Inlet Valve Size	Boiler Operating Pressure	Vent	Drain 150# ASA Flanged	A	B	C (with After Cooler)	D	E	After Cooler Controls (Manual)
200	10" Dia. x 20" Lg.	1/2" FNPT.	250	2 1/2" FNPT.	2 1/2"	17 1/2"	17"	32"	32"	4 3/8"	3/4"
210		3/4" FNPT.	150	2 1/2" FNPT.	2 1/2"	17 1/2"	17"	32"	32"	4 3/8"	3/4"
220		3/4" FNPT.	250	3" FNPT.	3"	17 1/2"	17"	32"	32"	4 1/2"	1"
230		1" FNPT.	200	3" FNPT.	3"	17 1/2"	17"	32"	32"	4 1/2"	1"
400	16" Dia. x 26" Lg.	1" FNPT.	250	4" 150# FLG.	4"	23 1/4"	22 1/2"	38"	45"	6 7/16"	1"
410		1 1/4" FNPT.	100	4" 150# FLG.	4"	23 1/4"	22 1/2"	38"	45"	6 7/16"	1 1/4"
420		1 1/4" FNPT.	150	4" 150# FLG.	4"	23 1/4"	22 1/2"	38"	45"	6 7/16"	1 1/4"
430		1 1/4" FNPT.	250	5" 150# FLG.	4"	23 1/4"	22 1/2"	38"	45"	6 7/16"	1 1/4"
440		1 1/2" FNPT.	50	4" 150# FLG.	4"	23 1/4"	22 1/2"	38"	45"	6 7/16"	1 1/4"
450		1 1/2" FNPT.	200	5" 150# FLG.	5"	23 1/4"	22 1/2"	38"	45"	6 7/16"	1 1/2"
460		1 1/2" FNPT.	250	6" 150# FLG.	5"	23 1/4"	22 1/2"	38"	45"	6 3/16"	1 1/2"
470		2" FNPT.	50	5" 150# FLG.	4"	23 1/4"	22 1/2"	38"	45"	6 7/16"	1 1/4"
480		2" FNPT.	225	6" 150# FLG.	6"	23 1/4"	22 1/2"	38"	45"	6 3/16"	2"
490		2 1/2" FNPT.	50	6" 150# FLG.	5"	23 1/4"	22 1/2"	38"	45"	6 3/16"	1 1/2"
600	20" Dia. x 44" Lg.	2 1/2" FNPT.	125	6" 150# FLG.	6"	26"	26 1/2"	38"	65"	8 3/8"	2"
610		2 1/2" FNPT.	200	8" 150# FLG.	6"	26"	26 1/2"	38"	65"	8 3/8"	2 1/2"
620		2 1/2" FNPT.	250	10" 150# FLG.	6"	26"	26 1/2"	38"	65"	8 3/8"	2 1/2"

Blow-Off Inlet Size	1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"			
	70°F	80°F	70°F	80°F	70°F	80°F	70°F	80°F	70°F	80°F	70°F	80°F	70°F	80°F		
Boiler Operating Pressure (PSI)	0-50	1/2	3/4	1/2	3/4	1/2	3/4	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	2 1 1/4	
	51-100	3/4	3/4	1	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/2	2	2	2 1 1/4	
	101-125	3/4	3/4	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	2	2	2 1/2	2 1/2
	126-175	3/4	3/4	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2
	176-225	3/4	3/4	1	1	1	1	1 1/4	1 1/4	1 1/2	1 1/2	2	2	2 1/2	2 1/2	2 1/2
	226-250	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2
	251-300	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	2	2	2 1/2	2 1/2	2 1/2

◀ BASED ON 40# COOLING WATER SUPPLY PRESSURE.

■ SHADED AREA SIZES INDICATE HIGH CAPACITY (HC) VALVE.