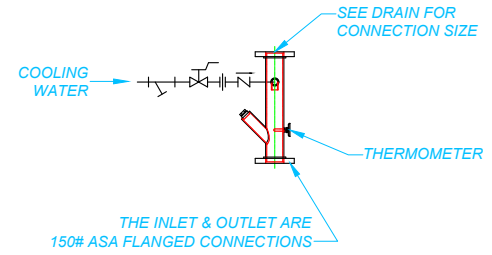


OPTIONAL AUTOMATIC AFTER COOLER PIPING



OPTIONAL MANUAL AFTER COOLER PIPING

- 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).

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"	

AUTOMATIC AFTER COOLER VALVE SIZING CHART

Blow-Off Inlet Size	1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"		
	Cooling Water Temp		Cooling Water Temp		Cooling Water Temp		Cooling Water Temp		Cooling Water Temp		Cooling Water Temp		Cooling Water Temp		
	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	1 1/4	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	2	2	2 1/2	2 1/2
													1 1/4	1 1/4	1 1/4
	126-175	3/4	3/4	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/2	2	2	2 1/2	2 1/2
													1 1/4	1 1/4	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
													1 1/4	1 1/4	1 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	2	2 1/2	2 1/2	2 1/2
													1 1/4	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	
												1 1/4	1 1/4	1 1/2	

BASED ON 40# COOLING WATER SUPPLY PRESSURE.

SHADED AREA SIZES INDICATE HIGH CAPACITY (HC) VALVE.

**SHIPCO® PUMPS**  
 MANUFACTURED BY  
 SHIPPENSBURG PUMP COMPANY INC.  
 P.O. Box 279 Shippensburg, Pa. 17257  
 PHONE 717 532-7321 / FAX 717 532-7704  
 WWW.SHIPCO PUMPS.COM  
 SHIPCO® IS A REGISTERED TRADEMARK OF SHIPPENSBURG PUMP CO., INC.

**Model BDS**  
 Blow Down Separator  
 ASME Code Stamped For 150 PSIG

DRAWN BY: M.GLADFELTER DATE: 3/16 REVISION: .3  
 DIMENSION PRINT: BLOW DOWN SEPARATOR