

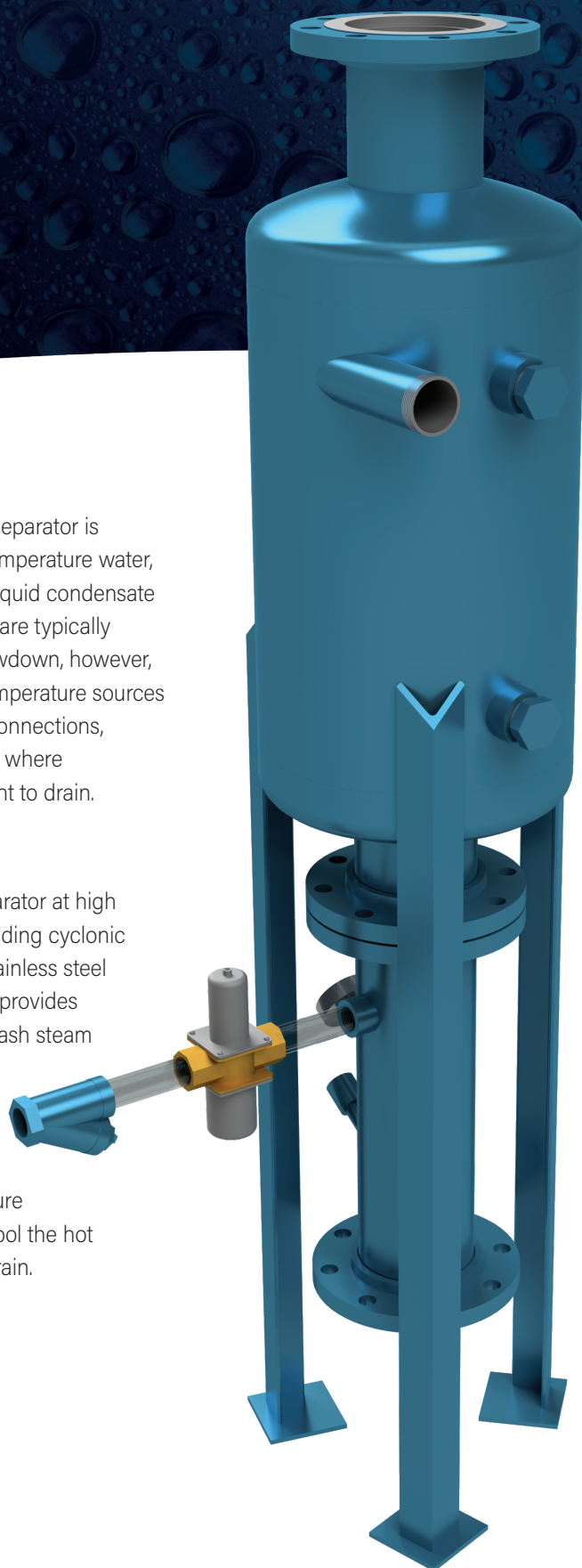
BLOWDOWN SEPARATOR



**Lockwood
Products**

The Lockwood Model BDS blowdown separator is designed to accept pressurized, high temperature water, and separate the flash steam from the liquid condensate for safe disposal. Blowdown separators are typically utilized to dispose of boiler blowoff/blowdown, however, they can also be used for other high temperature sources such as deaerator drain and overflow connections, process drains, or any other application where pressurized condensate needs to be sent to drain.

Pressurized condensate enters the separator at high speeds tangential to the shell thus providing cyclonic separation of the steam and water. A stainless steel wear plate at the point of impingement provides improved resistance to erosion. Clean flash steam is vented to atmosphere via the large non obstructed vent. The remaining condensate is drained via gravity out the bottom of the tank. An optional aftercooler with an automatic temperature regulating valve is typically utilized to cool the hot condensate before it is discharged to drain.



STANDARD SEPARATOR FEATURES:

- 5/16" thick ASME Section VIII separator vessel
- Stainless steel wear plate
- Support legs

AFTERCOOLER FEATURES:

- Automatic temperature regulating valve with strainer
- Thermometer

OPTIONS:

- Increased shell thickness: 3/8" thick
- National Board Certification
- Pressure Gauge

CUSTOM ENGINEERED SOLUTIONS TO COMPLEX PROBLEMS

BLOWDOWN SEPARATOR SIZING CHART

BOILER OPERATING PRESSURE (PSI)	SIZE OF BLOWDOWN VALVE ON BOILER				
	1"	1-1/4"	1-1/2"	2"	2-1/2"
15	BDS20-1-2-2.5-0.75	BDS20-1.25-3-4-1	BDS20-1.5-3-4-1.25	BDS20-2-4-5-1.25	BDS34-2.5-5-6-2
50	BDS20-1-2-2.5-0.75	BDS20-1.25-3-4-1	BDS34-1.5-3-4-1.25	BDS34-2-4-5-1.25	BDS34-2.5-5-6-2
100	BDS20-1-3-2.5-1	BDS34-1.25-4-4-1.25	BDS34-1.5-4-4-1.25	BDS34-2-5-5-2	BDS34-2.5-6-6-2
125	BDS34-1-3-3-1	BDS34-1.25-4-4-1.25	BDS34-1.5-4-4-1.25	BDS34-2-5-5-2	BDS56-2.5-6-6-2.5
150	BDS34-1-3-3-1	BDS34-1.25-4-4-1.25	BDS34-1.5-4-5-1.5	BDS56-2-5-6-2	BDS56-2.5-6-6-2.5
175	BDS34-1-3-3-1	BDS34-1.25-4-4-1.25	BDS34-1.5-4-5-1.5	BDS56-2-5-6-2	BDS56-2.5-6-8-2.5
200	BDS34-1-3-3-1	BDS34-1.25-4-5-1.25	BDS56-1.5-4-5-1.5	BDS56-2-6-6-2	BDS56-2.5-6-8-2.5
225	BDS34-1-4-4-1.25	BDS56-1.25-4-5-1.25	BDS56-1.5-5-5-1.5	BDS56-2-6-6-2	
250	BDS56-1-4-4-1.25	BDS56-1.25-4-5-1.25	BDS56-1.5-5-5-1.5	BDS56-2-6-8-2.5	
300	BDS56-1-4-4-1.25	BDS56-1.25-4-5-1.5	BDS56-1.5-5-5-2	BDS56-2-6-8-2.5	

Select the appropriate blowdown separator based on the boiler operating pressure and the size of the blowdown valve installed on the boiler. If multiple boilers are connected to one separator, use the highest operating pressure and largest blowdown valve for the selection.

NOTES:

- The aftercooler temperature regulating valve is sized assuming a cooling water temperature of 70-80°F.
- The aftercooler temperature regulating valve is sized assuming an upstream water pressure of 40 PSI.

MODEL NUMBER: MODEL | SIZE | INLET | DRAIN | VENT | VALVE

MODEL

BDS

SIZE

Shell "Height"*
 20 = 24"
 34 = 36"
 56 = 61"

INLET

Blowdown Inlet Size

1 = 1" NPT
 1.25 = 1-1/4" NPT
 1.5 = 1-1/2" NPT
 2 = 2" NPT
 2.5 = 2-1/2" NPT

DRAIN

Drain Size

2 = 2" NPT
 3 = 3" NPT
 4 = 4" FLG
 5 = 5" FLG
 6 = 6" FLG

VENT

Steam Vent Size

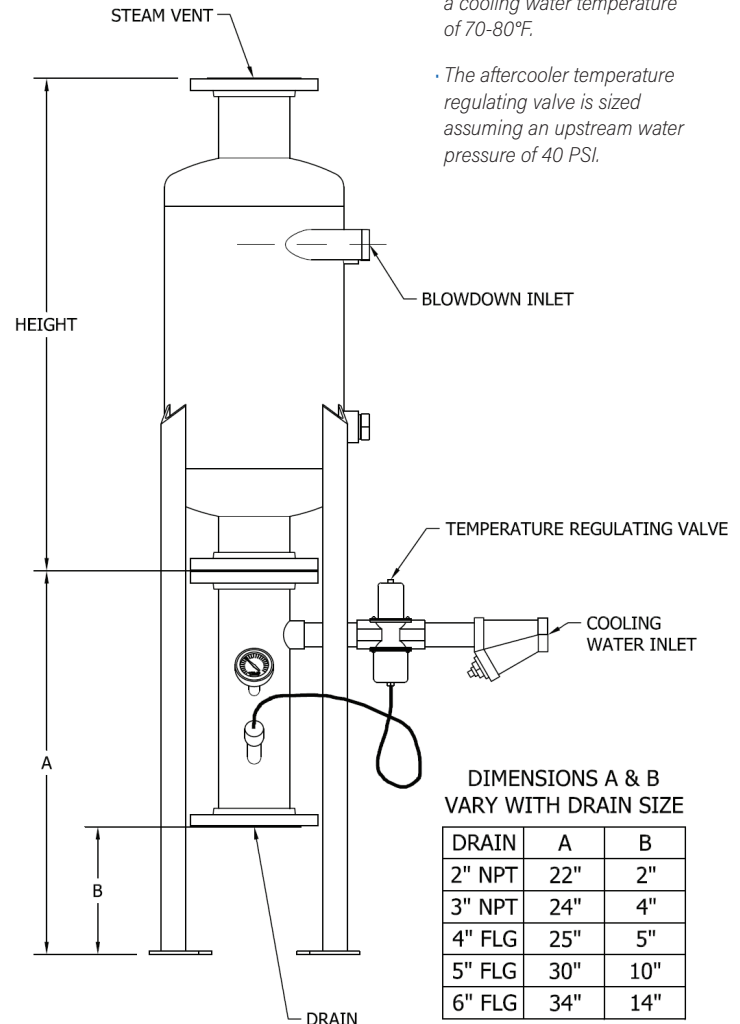
2.5 = 2-1/2" NPT
 3 = 3" NPT
 4 = 4" FLG
 5 = 5" FLG
 6 = 6" FLG
 8 = 8" FLG

VALVE

Optional Aftercooler Valve
 (Not Provided If Blank)

0.75 = 3/4" NPT
 1 = 1" NPT
 1.25 = 1-1/4" NPT
 1.5 = 1-1/2" NPT
 2 = 2" NPT
 2.5 = 2-1/2" NPT

*Shell height is approximate and subject to change without notice.



NOTE:

IF ALL CONNECTIONS ARE THREADED, MAWP = 250 PSI
 IF 150# FLANGES ARE UTILIZED, MAWP = 150 PSI
 IF 300# FLANGES ARE UTILIZED, MAWP = 250 PSI



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