CMS Centrifugal Blowdown Separator



Blowdown B	lowdown		-	Vessel	Aftercooler	Cold Water	-	Regulating	Valve	
Separator	Inlet	Drain	Vent	Diameter -D-	Part No.	Inlet	Aftercooler	Valve	Size	
Model #	-A-	-B-	-C-	x Height -E-	-F-	Size	Size	Number	-G-	
Boilers Up To 150 psi.										
BDS20	3/4"	2-1/2"	2-1/2"	10" x 30"	AC20	3/4"	2-1/2"	AVTB1	3/4"	
BDS25	1"	2-1/2"	3"	10" x 30"	AC25	3/4"	2-1/2"	AVTB2	3/4"	
BDS32	1-1/4"	4"	4"	16" x 30"	AC32	1-1/4"	4"	AVTB11	1-1/4"	
BDS40	1-1/2"	4"	5"	16" x 30"	AC40	1-1/4"	4"	AVTB12	1-1/4"	
BDS50	2"	5"	5"	16" x 30"	AC50	1-1/2"	5"	AVTB13	1-1/2"	
Boilers Up to 300 psi.										
BDS20HP	3/4"	3"	4"	16" x 42"	AC20HP	1"	3"	AVTB1	1"	
BDS25HP	1"	4"	4"	16" x 42"	AC25HP	1-1/4"	4"	AVTB2	1-1/4"	
BDS32HP	1-1/4"	4"	5"	16" x 42"	AC32HP	1-1/4"	4"	AVTB11	1-1/4"	
BDS40HP	1-1/2"	5"	6"	16" x 42"	AC40HP	1-1/2"	5"	AVTB12	1-1/4"	
BDS50HP	2"	6"	8"	16" x 42"	AC50HP	1-1/2"	6"	AVTB13	1-1/2"	



Centrifugal Blowdown Tanks



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These heavy steel tanks receive the bottom blowdown water from a boiler and cool it down using the flash steam principle, along with convection cooling over several hours for the retained hot water. The tank is designed to breakup the blowdown flow by impacting the high pressure hot water on the steel centrifugal impact plate. The water droplets give up heat as flash steam is formed. The flash steam is vented from the top of the tank to the atmosphere. Retained water displaces cooled water from the previous blowdown, and is retained in the tank until it cools to the statute limits.

Data required for sizing calculations:

- Blowdown pipe size, type and equivalent length to tank.
- Boiler steam drum diameter & length.
- Boiler operating pressure

Model Number	Diameter	Shell A	NPT B	150#RF C	Flange D	NPT E	OAH F
BDT1600	16"	35.5"	Up to 2"	*2-1/2"	*2"	2"	66"
BDT2400	24"	32"	Up to 2"	*3"	*2"	2"	66"
BDT3000	30"	29"	Up to 2"	4"	*2"	2"	66"
BDT3600	36"	30"	Up to 2"	4"	3"	2"	70"
BDT4200	42"	42"	Up to 2"	5"	3"	2"	85"
BDT4800	48"	48"	Up to 2"	6"	4"	2"	94"
BDT5400	54"	66"	Up to 2"	6"	4"	2"	116"
BDT6000	60"	72"	Up to 2"	6"	4"	2"	125"
BDT7200	72"	96"	Up to 2"	10"	4"	2"	155"

*These connections are NPT

- Shell length (Dimension A) and connections size dimensions can be changed to meet the application requirements for the specific boiler as determined by design rule calculations.
- Sizing of tank and connections should be determined using provincial codes. Please consult CMS for advice
- Construction: ASME Section VIII, Div. 1, 50 psi DWP,

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