

Standard
Deaerating
Units

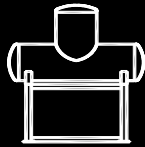


KANSAS CITY DEAERATOR



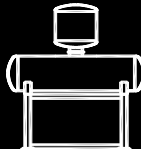
HS Series

Up to 350,000 #/hr
Low Headroom



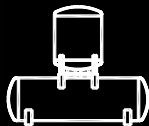
TC Series

Up to 250,000 #/hr
Tray Unit
Meets HEI



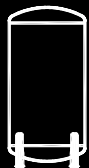
BDS Series

Up to 250,000 #/hr
Tray Unit
Meets HEI



DS Series

Up to 800,000 #/hr
Tray Unit
Meets HEI



VS & VT Series

Up to 800,000 #/hr
Tray Unit
Minimal Plan Area
Meets HEI



HH Series

Up to 16,000,000 #/hr
Tray Unit-Meets HEI

IB – Intermittent Blowdown WITH AFTERCOOLER

Principles of Operation

Kansas City Deaerator's Intermittent Blowdown (IB) Separator System is utilized to flash high temperatures / pressure boiler blowdown steams to low pressure. The separated steam is vented to atmosphere or returned to the deaerator.

The liquid portion is then passed through an atemperation which mixes cold water with the blowdown to reduce the temperature to acceptable levels for discharge to drain.

FEATURES

- ASME Code Section VIII Vessel
- Stainless Steel Wear Plate
- Structural Legs
- Aftercooler
- Temperature Regulating Valve
- Strainer
- Thermometer

Intermittent Blowdown



INTERMITTENT BLOWDOWN w/AFTERCOOLER

SPECIFICATIONS

Blowdown Separator

Furnish and install as shown on plans:

() Boiler Blow-Down Separator(s). Model _____ " Height _____ ' Inlet _____ Drain _____ " VentSelect Plate Thickness 5/16" or 3/8" thk ASME Code 250 psig @ 450 Deg. F W/Screwed, Weld Bevel, or Flanged connections. Separator to have Stainless Steel Striking Plate at point of inlet impingement, as manufactured by Kansas City Deaerator Company.

Separator Accessories

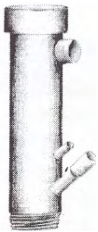
Furnish and install a separator w/3 Angle Legs for Floor Mounting () or Wall Brackets ().

AND

Furnish and install as shown on plans for Manual Cooling of Drain Water Temperature Separator Aftercooler Model A5D- _____ ' w/ _____ ' C.W. I. (cold water inlet)

OR

Furnish and install as shown on plans for Automatic Control of Drain Water Temperature Separator Aftercooler Model 18DF _____ ", 16DS _____ ", or 20 AO _____ " w/ _____ " C.W.I., a Temperature Regulator Valve, Strainer, and a 2" Dial Bimetal Thermometer.

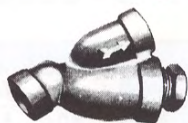
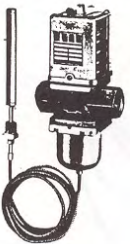


A16DS – Simplified Automatic Aftercooler.

Similar to our 18DF aftercooler described above only without the middle flanges. This aftercooler accommodates the cold water line, sensing bulb, and thermometer. Sizing should match the drain line size. Cooling water selection from Chart "B": assures adequate cooling of condensate to drain.

Self Actuating Temperature Regulator Valve

Automatically controls the flow of cooling water to the aftercooler fittings by responding to the temperature change at the bulb. Each is factory set at 135 deg. F. with an adjustable range from 115-180 deg. F. the 6' capillary allows installation of the valve in the cold water line while the bulb is remotely located in the aftercooler. The valve size should correspond to the recommended size on Chart "B"

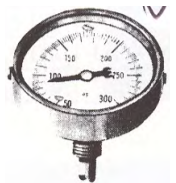


"Y" Type Strainer

Cast iron construction with a .033 inch stainless steel screen are recommended prior to temperature regulator valve or solenoid valve in the cold water line to protect these cold water valves.

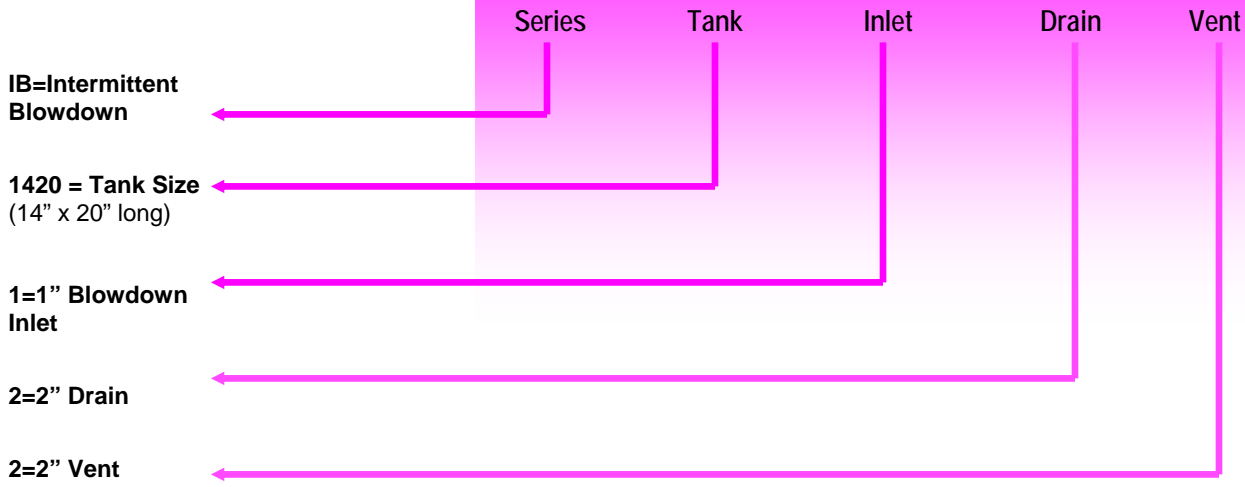
Bi-Metal Thermometer

Stainless steel body in 4" or 6" stainless steel stem. 1/4" connection provided for use in the A18DF, A16DS or A20AO aftercoolers. Graduated scale shows temperature range 50 to 300 deg. F.



Model Number Selection

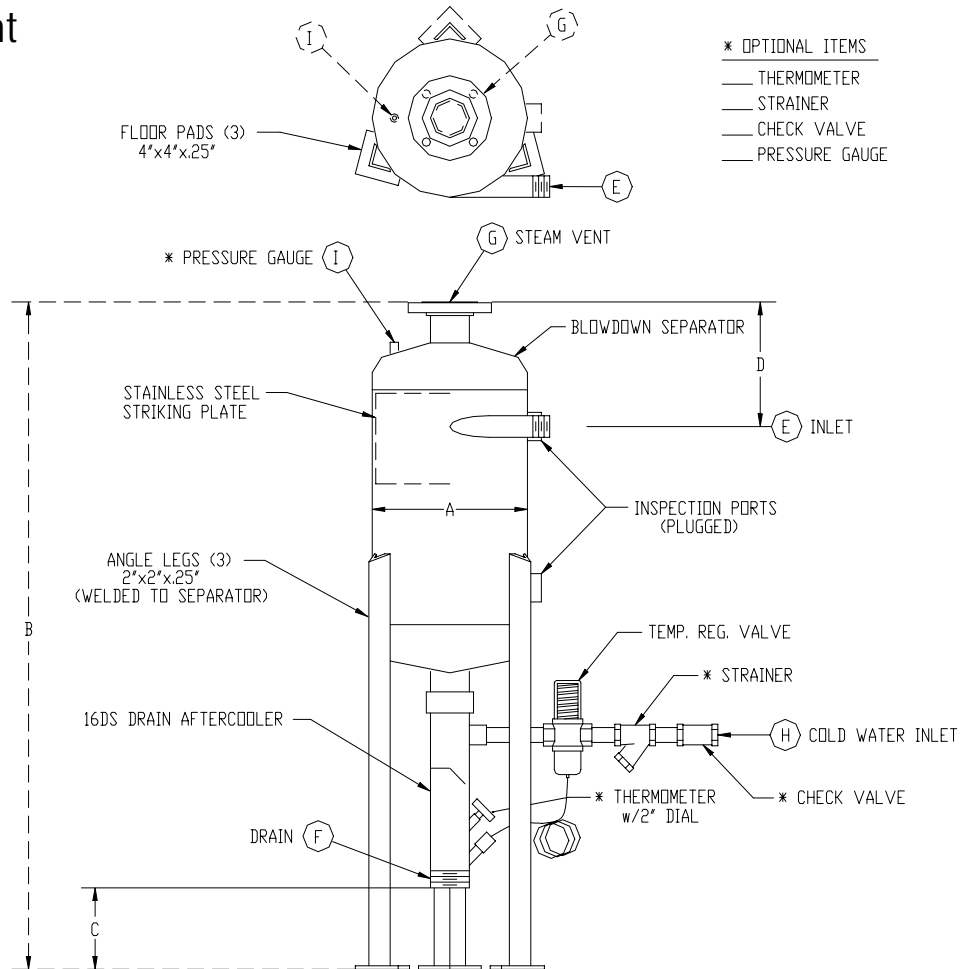
INTERMITTENT BLOWDOWN



EXAMPLE:

SERIES	TANK	INLET	DRAIN	VENT
IB	1420	1	2	2
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Typical Arrangement



SELECTION CHART

BLOWDOWN MODEL	Boiler Pressure (PSIG)	Blow-down (#/HR)	Condensate (GPM)	Cold Water (GPM)	Tank Dia. "A"(in)	Tank Length "B"(in)	"C"	"D"	Inlet "E"	Drain "F"	Vent "G"	Cold H ² O "H"
IB1420-1-2-2	50	6,444	12.17	12.52	14"	42"	2"	11"	1"	2"	2"	.5"
IB1420-1.25-3-3	50	13,472	25.44	26.17	14"	44"	4"	11"	1.25"	3"	3"	.5"
IB1434-1.5-3-3	50	19,437	36.70	37.76	14"	58"	4"	11"	1.25"	3"	3"	.75"
IB1434-2-4-4	50	37,454	70.69	72.74	14"	71"	11"	13"	2"	4"	4"	1.25"
IB1420-1-3-3	100	11,844	21.18	21.80	14"	44"	4"	11"	1"	3"	3"	.5"
IB1434-1.25-3-4	100	22,284	39.67	40.82	14"	60"	4"	13"	1.25"	3"	4"	.75"
IB1434-1.5-4-4	100	33,573	60.03	61.77	14"	71"	11"	13"	1.5"	4"	4"	1"
IB1434-2-4-6	100	60,536	108.24	111.38	14"	71"	11"	13"	2"	4"	6"	2"
IB1434-1-3-4	150	15,394	26.48	27.25	14"	60"	4"	13"	1"	3"	4"	.5"
IB1434-1.25-4-4	150	30,792	52.96	54.50	14"	71"	11"	13"	1.25"	4"	4"	1"
IB1434-1.5-4-6	150	44,625	76.88	79.11	14"	71"	11"	13"	1.5"	4"	6"	1.25"
IB1456-2-6-6	150	79,721	137.12	141.09	14"	96"	13"	13"	2"	6"	6"	2"
IB1434-1-3-4	200	19,690	32.84	33.80	14"	60"	4"	13"	1"	3"	4"	.75"
IB1434-1.25-4-6	200	37,848	63.13	64.96	14"	71"	11"	13"	1.25"	4"	6"	1.25"
IB1456-1.5-4-6	200	53,893	89.89	92.50	14"	93"	11"	13"	1.25"	4"	6"	1.5"
IB1456-2-6-6	200	94,496	157.62	162.19	14"	96"	13"	13"	2"	6"	6"	2"
IB1434-1-4-4	250	21,838	35.25	36.27	14"	71"	11"	13"	1"	4"	4"	1"
IB1456-1.25-4-6	250	42,339	68.34	70.32	14"	93"	11"	13"	1.25"	4"	6"	1.5"
IB1456-1.5-4-6	250	60,962	98.39	101.25	14"	93"	11"	13"	1.50"	4"	6"	2"
IB1456-2-6-8	250	109,261	176.35	181.46	14"	96"	13"	13"	2"	6"	8"	2.5"
IB1456-1-4-6	300	25,060	39.70	40.85	14"	93"	11"	13"	1"	4"	6"	1"
IB1456-1.25-4-6	300	48,754	77.23	79.47	14"	93"	11"	13"	1.25"	4"	6"	1.5"
IB1456-1.5-6-6	300	69,796	110.56	113.76	14"	96"	13"	13"	1.50"	6"	6"	2"
IB1456-2-6-8	300	122,550	194.12	199.75	14"	96"	13"	13"	2"	6"	8"	2.5"

*CUSTOM SIZES AVAILABLE