

**SPECIFICATIONS**

**Blowdown Separator**

Furnish and install as shown on plans:  
 ( ) Boiler Blow-Down Separator(s). Model \_\_\_\_\_ " Height \_\_\_\_\_ ' Inlet \_\_\_\_\_ ' Drain \_\_\_\_\_ " Vent \_\_\_\_\_  
 .....Select 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)

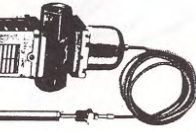
**OR**

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.



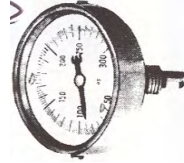
**Self Actuating Temperature Regulator Valve**

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. ¼" connection provided for use in the A18DF, A16DS or A20AO aftercoolers. Graduated scale shows temperature range 50 to 300 deg. F.

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**KANSAS CITY DEAERATOR**

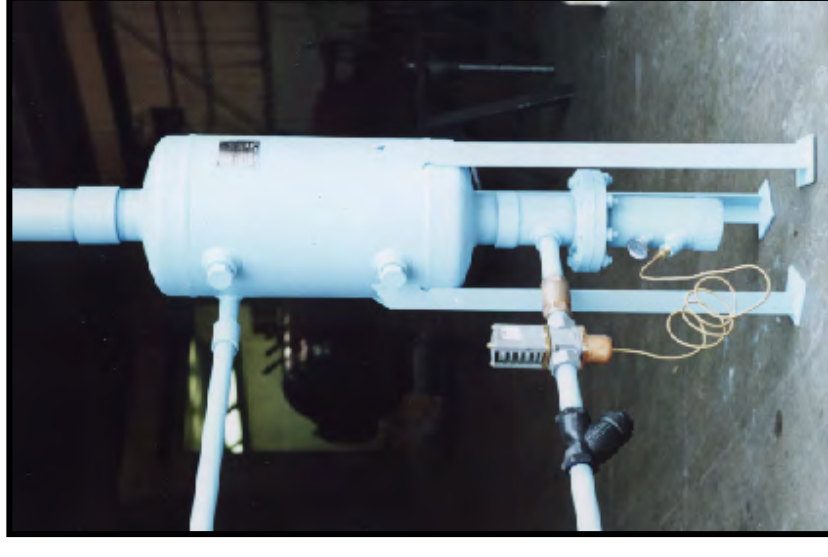
**IB – Intermittent Blowdown**  
 WITH AFTERCOOLER

**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 atemperature which mixes cold water with the blowdown to reduce the temperature to acceptable levels for discharge to drain.

**Intermittent Blowdown**

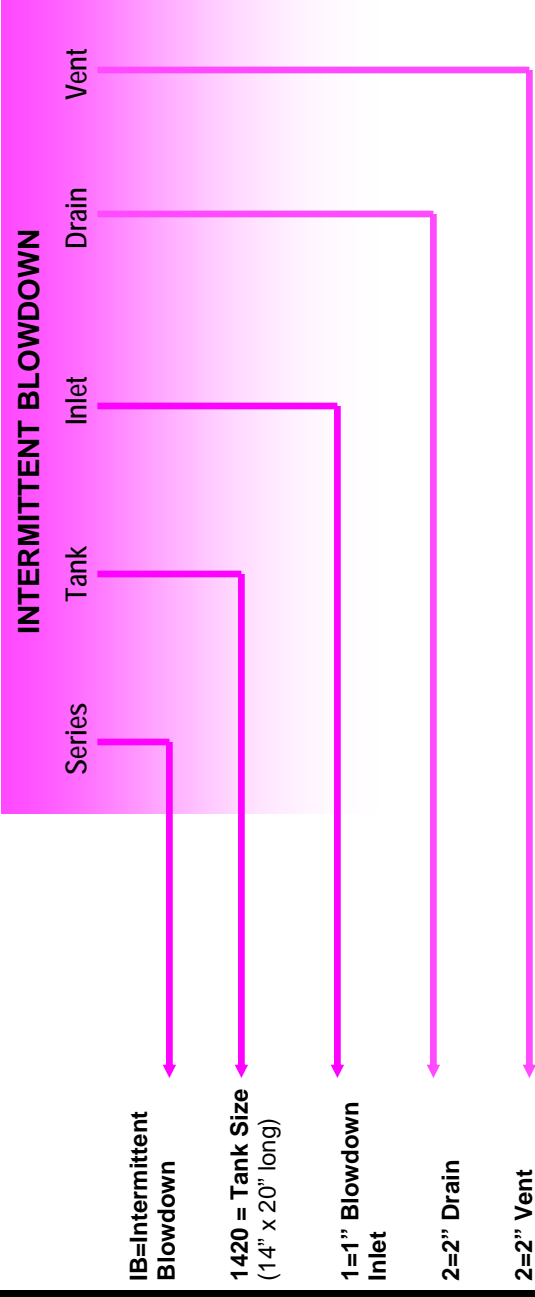


**FEATURES**

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

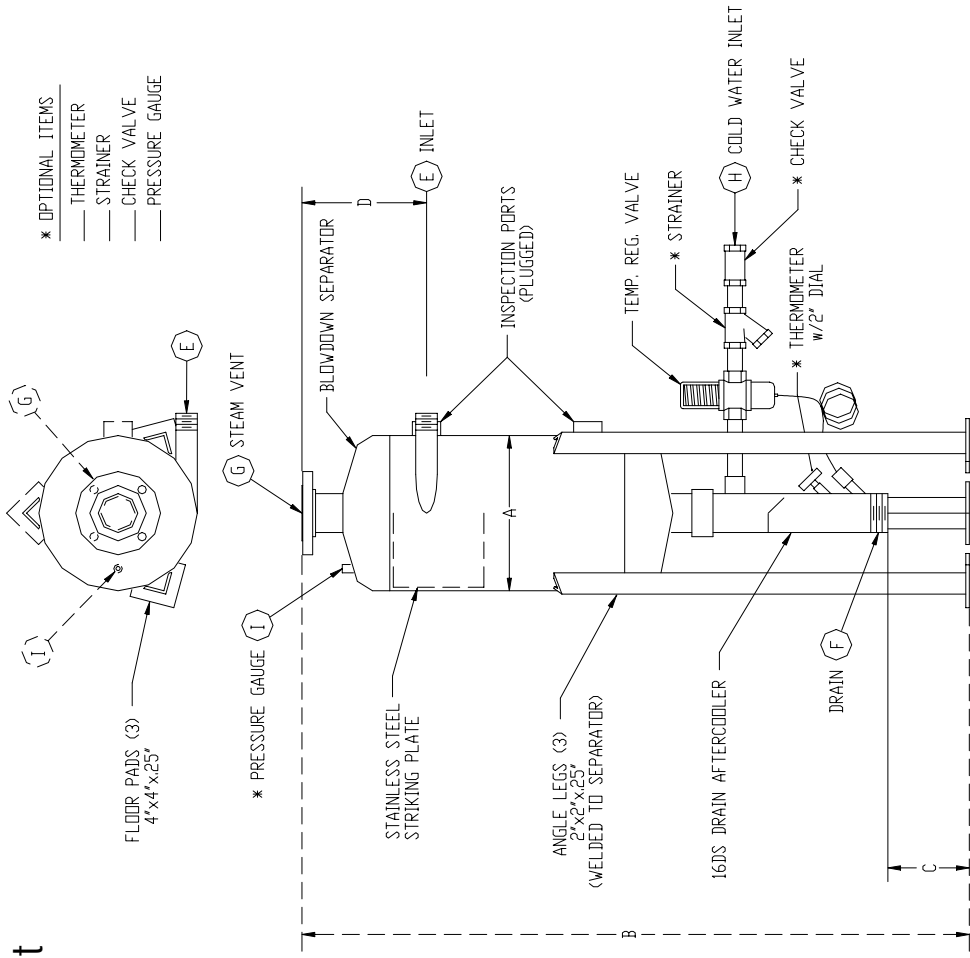


Model Number Selection



**EXAMPLE:** SERIES TANK INLET DRAIN VENT  
**IB 1420 -- 1 -- 2 -- 2**

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 <sub>2</sub> 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