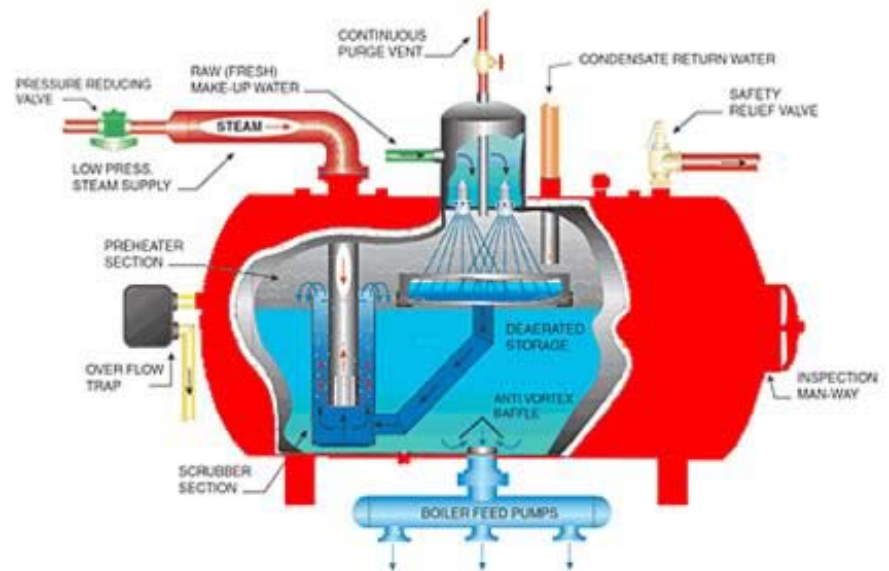


DEAERATORS

**Guaranteed to Remove Oxygen in Boiler Feedwater to .005cc/liter
Available from 5,000 to 200,000 LBS/HR**

The **CRG** deaerating boiler feedwater system eliminates the need of expensive oxygen scavenger chemicals and also offers the following advantages:

- Removes carbon dioxide as well as oxygen.
- Raises the boiler feedwater temperature, eliminating thermal shock in boilers.
- Improves overall boiler room efficiency.
- Feedwater pumps are sized for each individual application - assuring total compatibility and optimum operation.
- Vessels are ASME Code constructed for 50 psig.
- Compact design means smaller boiler room requirements.



WHY DEAERATE?

The use of deaerators has long been used in power plants and water tube type boilers, primarily because they remove undissolved oxygen and raise the temperature of the feedwater. These advantages are important today for firetube boilers as well, due to higher capital investments.

Operating costs can be reduced by recovering flash steam when returned by high temperature condensate. This feature also raises the feedwater temperature, thus requiring less boiler fuel to convert the feedwater to useable steam.

Boiler tubes, condensate lines, and process piping have a much longer useful life by eliminating the pitting action of untreated water. This advantage alone justifies the cost of a **CRG** deaerator.

HOW DOES IT WORK?

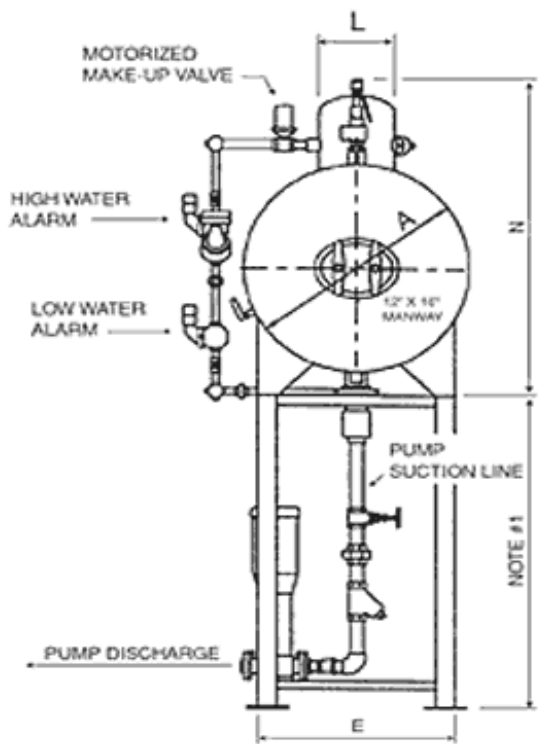
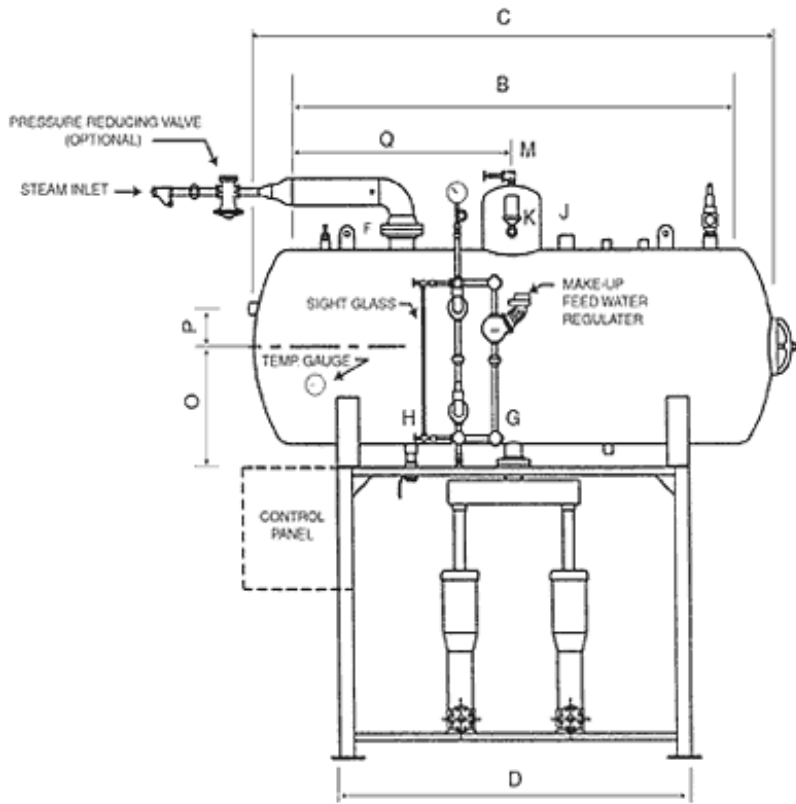
Undeaerated fresh water is fed into the deaerator through the inlet water connection. This water passes through the steam-filled heating and venting section. The water temperature is raised and many of the undissolved gases are released. As the water passes through the assembly, it flows to a scrubber section where final deaeration is accomplished by scrubbing the water with oxygen free steam. This steam is induced through a stainless steel spray valve assembly which causes the high velocity steam to break the water down to a fine mist through a violent scrubbing action. The deaerated water spills over to the tanks storage compartment for use by the boiler, and the gases are vented to the atmosphere.

STANDARD FEATURES :

- Welded steel tank, designed and constructed for 50 psig as per the requirements of ASME Code; deaerating section with spray valve.
- Structural steel stand with square tubing and steel pump platform.
- Feedwater pump and motor sets, sized for each application.
- Water inlet valve assembly for condensate return and fresh water.
- Overflow trap, tank thermometer, pressure gauge.
- Steam pressure reducing valve assembly with temperature controller.
- Safety relief valve(s), vent valves, tank drain valve.
- Water gauge glass set with cocks, drain valve, and protection rods.
Pump suction piping with strainer and shut-off valve.

Deaerator Specifications (all dimensions are in inches)

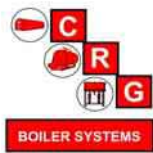
-	DEAERATOR MODEL NO.	-	-	DA-5	DA-7	DA-10	DA-12	DA-14	DA-16	DA-19	DA-22	DA-26	-
-	WEIGHT	TANK/TRIM	LBS	2400	2400	2700	2700	3000	3000	4000	4000	4500	-
-	CAPACITY	-	LBS/HR	5,000	7,000	10,000	12,000	14,000	16,000	19,000	22,000	26,000	-
-	WATER CAPACITY	@ OVERFLOW	GAL	268	268	331	331	456	456	789	789	957	-
-	WATER CAPACITY	@ NWL	GAL	118	118	141	141	189	189	285	285	347	-
-	WATER CAPACITY (W/DOME)	FLOODED	GAL	354	354	424	424	565	565	877	877	1033	-
A	TANK DIAMETER	-	IN	42	42	42	42	42	42	48	48	48	A
B	TANK LENGTH	-	IN	48	48	60	60	84	84	96	96	120	B
C	OVERALL LENGTH	BARE VESSEL	IN	70	70	81 1/2	81 1/2	105	105	118	118	142	C
D	SUPPORT STAND LENGTH	-	IN	46	46	54	54	72	72	84	84	96	D
E	SADDLE WIDTH	-	IN	36	36	36	36	36	36	42	42	42	E
F	STEAM INLET	150#-FLNG	IN	4	4	4	4	6	6	6	6	6	F
G	WATER OUTLET	150#-FLNG	IN	3	3	3	3	4	4	4	4	6	G
H	TANK DRAIN	-	IN	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2	2	H
I	OVERFLOW	-	IN	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2	I
J	CONDENSATE RETURN	-	IN	2	2	2	2	2 1/2	2 1/2	3	3	3	J
K	INLET WATER	-	IN	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	K
L	DOMES DIAMETER	-	IN	12	12	12	12	14	14	16	16	16	L
M	STEAM PURGE VENT	-	IN	3/4	3/4	3/4	3/4	1	1	1	1	1	M
N	TANK HEIGHT	FROM SUPPORT	IN	66	66	66	66	72	72	76	76	76	N
O	BASE OF SADDLE TO C/L OF TANK	-	IN	27	27	27	27	29	29	30	30	30	O
P	C/L TO OVERFLOW	-	IN	7 1/2	7 1/2	9	9	9	9	9 1/2	9 1/2	9 1/2	P
Q	HD. TO VENT CONNECTION	-	IN	24	24	30	30	42	42	48	48	60	Q
-	DEAERATOR MODEL NO.	-	-	DA-5	DA-7	DA-10	DA-12	DA-14	DA-16	DA-19	DA-22	DA-26	-



-	DEAERATOR MODEL NO.	-	-	DA-30	DA-35	DA-40	DA-50	DA-60	DA-80	DA-100	DA-125	DA-150	DA-200	-
	WEIGHT	TANK/TRIM	LBS	4500	4750	5700	7300	8000	8800	9500	10500	11500	14000	-
	CAPACITY	-	LBS/HR	30,000	35,000	40,000	50,000	60,000	80,000	100,000	125,000	150,000	200,000	-
	WATER CAPACITY	@ OVERFLOW	GAL	957	1025	1224	1600	1931	2421	2717	3810	4354	5796	-
	WATER CAPACITY	@ NWL	GAL	347	365	444	560	679	848	954	1324	1517	1998	-
	WATER CAPACITY (W/DOME)	FLOODED	GAL	1033	1091	1305	1673	2022	2521	2832	3935	4499	5956	-
A	TANK DIAMETER	-	IN	48	54	54	66	66	72	72	84	84	96	A
B	TANK LENGTH	-	IN	120	96	120	96	120	126	144	144	168	168	B
C	OVERALL LENGTH	BARE VESSEL	IN	142	123 1/2	147 1/2	126 1/4	148 1/4	156	174	179	203	207	C
D	SUPPORT STAND LENGTH	-	IN	96	84	102	84	108	108	120	132	128	132	D
E	SADDLE WIDTH	-	IN	42	48	48	56	56	60	60	66	66	78	E
F	STEAM INLET	150#-FLNG	IN	6	6	6	8	8	10	10	10	10	10	F
G	WATER OUTLET	150#-FLNG	IN	6	6	6	6	6	6	6	8	8	8	G
H	TANK DRAIN	-	IN	2	2	2	2	2 1/2	2 1/2	2 1/2	2 1/2	3	2 1/2	H
I	OVERFLOW	-	IN	2	2	2	3	3	3	3	3	3	6	I
J	CONDENSATE RETURN	-	IN	3	3	3	4	4	4	4	6	6	6	J

K	INLET WATER	-	IN	1 1/2	2	2	2	2	2	2	2 1/2	2 1/2	4	K
L	DOME DIAMETER	-	IN	16	18	18	20	20	20	20	24	24	30	L
M	STEAM PURGE VENT	-	IN	1	1	1	1	1	1	1	1	1	1	M
N	TANK HEIGHT	FROM SUPPORT	IN	76	86	86	101	101	111	111	124	124	135	N
O	BASE OF SADDLE TO C/L OF TANK	-	IN	30	35	35	41	41	44	44	50	50	56	O
P	C/L TO OVERFLOW	-	IN	9 1/2	11 3/4	11 3/4	16	16	16	16	17	17	24	P
Q	HD. TO VENT CONNECTION	-	IN	60	51	60	48	60	60	72	72	84	84	Q
-	DEAERATOR MODEL NO.	-	-	DA-30	DA-35	DA-40	DA-50	DA-60	DA-80	DA-100	DA-125	DA-150	DA-200	-

**NOTE: STAND HEIGHT IS DEPENDENT ON NPSH OF PUMP REQUIRED
CONSULT FACTORY FOR LARGER SIZES.**



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