

BRYAN® STEAM

Spray Type Boiler Feedwater Deaerators Capacities 5,000 to 60,000 PPH (145 to 1740 BHP)



15,000 PPH unit shown

Performance Features

- Oxygen removal to .005 cc/l (7 PPB)
- CO₂ removal to 0% measurable
- Reduce chemical costs
- Reduce boiler and system corrosion
- Improve boiler efficiency
- Pre-heat boiler feedwater
- Quick equipment payback, compared to chemical oxygen removal

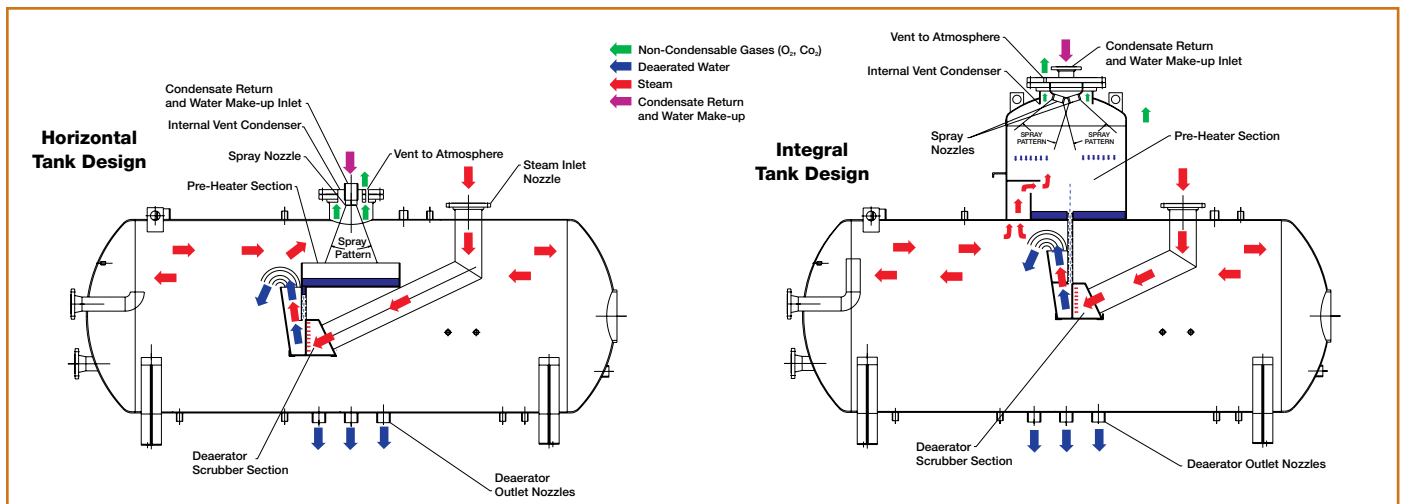
Construction Features

- Constructed to ASME Section VIII, Division I for 50 PSIG
- Easily accessible manway
- Standard 10 minutes deaerated water storage
- Internal vent condenser for minimum steam loss
- Self-adjusting spring-loaded stainless steel spray valve
- Structural steel stand/pump platform
- 2-stage deaeration
- Available as completely packaged unit including pumps and control panel

The Bryan spray type deaerator is rated for oxygen removal to .005cc/l (7 PPB) and CO₂ to zero measurable across its entire operating range. With its all stainless steel spring loaded spray valve and second stage steam scrubber, the spray type deaerator is a

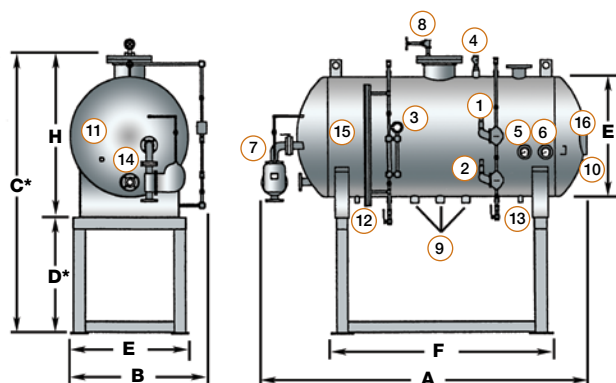
good choice for all deaerator applications.

Units are available with a complete range of boiler feedpumps and control options making them a total deaerator package with minimal amount of field assembly.

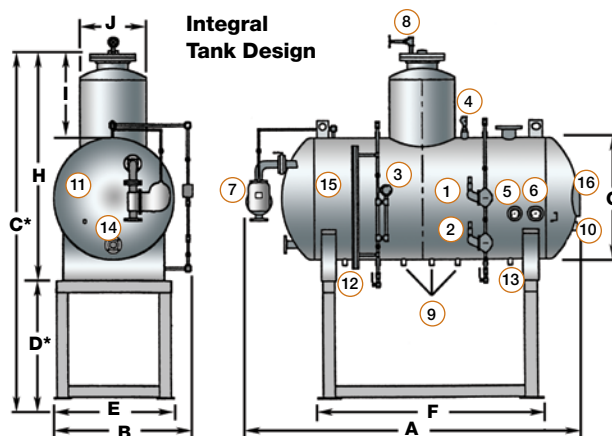


Bryan Spray Type Deaerators — Horizontal and Integral

Horizontal Tank Design



Integral Tank Design



*Note: Stand height varies depending upon pump specifications and job conditions. Dimensions are for reference only and may change without notice. Consult factory for certified dimensions.

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|-----------------------------|--|
| 1. High water level control | 10. Pump bypass |
| 2. Low water level control | 11. Chemical port |
| 3. Make-up water control | 12. Drain |
| 4. Vacuum breaker | 13. Sample port |
| 5. Temperature gauge | 14. High temperature condensate return |
| 6. Pressure gauge | 15. Gauge glass |
| 7. Overflow trap | 16. Manway access opening |
| 8. Vent | |
| 9. Pump suction | |

Specifications

Model	Capacity			Dimensions in inches (cm)									
	Pounds/hr (kg/h)	Boiler hp (kW)	Storage in gallons (liters)	A	B	C*	D*	E	F	G	H	I	J
				Overall length	Overall width	Overall height	Stand height	Stand width	Stand length	Vessel diameter	Vessel height	Spray dome height	Spray dome width
Horizontal Tank Design													
DSH-5	5,000 (2,268)	145 (1,422)	200 (757)	124 (315)	56 (142)	103 (262)	48 (122)	36 (91)	80 (203)	36 (91)	54.5 (138)	—	—
DSH-10	10,000 (4,563)	290 (2,844)	200 (757)	124 (315)	56 (142)	103 (262)	48 (122)	36 (91)	80 (203)	36 (91)	54.5 (138)	—	—
DSH-15	15,000 (6,804)	435 (4,267)	300 (1,136)	121 (307)	62 (158)	109 (277)	48 (122)	42 (107)	75 (191)	42 (107)	60.5 (154)	—	—
DSH-20	20,000 (9,072)	580 (5,689)	400 (1,514)	117 (297)	68 (173)	115 (292)	48 (122)	48 (122)	66 (168)	48 (122)	66.5 (169)	—	—
DSH-25	25,000 (11,340)	725 (7,111)	500 (1,893)	137 (348)	68 (173)	115 (292)	48 (122)	48 (122)	85 (216)	48 (122)	66.5 (169)	—	—
DSH-30	30,000 (13,608)	870 (8,533)	600 (2,271)	156 (396)	68 (173)	115 (292)	48 (122)	48 (122)	104 (264)	48 (122)	66.5 (169)	—	—
Integral Tank Design													
DST-35	35,000 (15,876)	1,014 (9,956)	700 (2,650)	137 (348)	68 (173)	153 (388)	48 (122)	48 (122)	86 (218)	48 (122)	105 (267)	47.25 (120)	36 (91)
DST-40	40,000 (18,144)	1,159 (11,378)	800 (3,028)	151 (354)	68 (173)	153 (388)	48 (122)	48 (122)	100 (254)	48 (122)	105 (267)	47.25 (120)	36 (91)
DST-45	45,000 (20,412)	1,304 (12,800)	900 (3,407)	141 (358)	74 (188)	159 (399)	48 (122)	54 (137)	85 (216)	54 (137)	110.5 (281)	47.25 (120)	36 (91)
DST-50	50,000 (22,680)	1,449 (14,222)	1,000 (3,785)	134 (340)	80 (203)	165.5 (420)	48 (122)	60 (152)	78 (198)	60 (152)	117 (297)	47.25 (120)	36 (91)
DST-60	60,000 (27,216)	1,739 (17,067)	1,200 (4,542)	177 (450)	80 (203)	165.5 (420)	48 (122)	60 (152)	120 (305)	60 (152)	117 (297)	47.25 (120)	36 (91)



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