

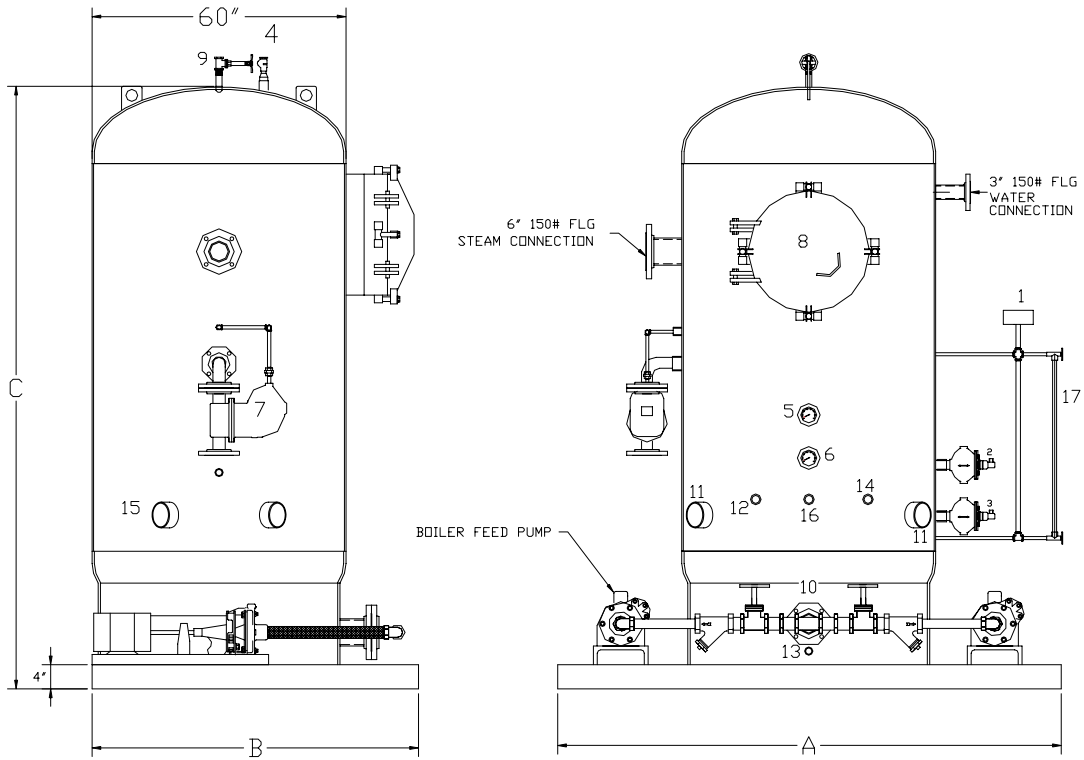
**TRAY TYPE DEAERATOR**  
**VERTICAL TANK DESIGN (20,000 PPH – 30,000 PPH)**

EFFECTIVE DATE: 04/5/2000

REPLACES: 00/00/00

**NOTES:**

1. CONTROL AND PIPING CONFIGURATIONS WILL VARY DEPENDING ON JOB SPECIFICATIONS AND CONDITIONS.
2. DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. CONSULT FACTORY FOR CERTIFIED DIMENSIONS.



- |                          |                              |                              |  |
|--------------------------|------------------------------|------------------------------|--|
| 1. MAKE-UP WATER CONTROL | 5. TEMPERATURE GAUGE         | 9. 1-1/2" NPT VENT           | 13. 1" NPT DRAIN                                   |
| 2. HIGH LEVEL CONTROL    | 6. PRESSURE GAUGE            | 10. 4" 150# FLG PUMP SUCTION | 14. 1" NPT SAMPLE PORT                             |
| 3. LOW LEVEL CONTROL     | 7. 3" 150# FLG OVERFLOW TRAP | 11. 2" NPT PUMP BYPASS       | 15. 3" 150# FLG HIGH TEMPERATURE CONDENSATE RETURN |
| 4. VACUUM BREAKER        | 8. 24" DIA. TRAY ACCESS DOOR | 12. 1" NPT CHEMICAL PORT     | 16. 1" NPT MAGNESIUM ANODE                         |

MODEL	CAPACITY			DIMENSIONS			INCHES CM
	LBS/HR Kg/HR	BOILER HP KW	(STORAGE) GALLONS LITERS	(A) OVER-ALL LENGTH	(B) OVER-ALL WIDTH	(C) OVER-ALL HEIGHT	
LDTV-150-20-4-*	20,000 44,092	580 5,686	400 1514	84 213	72 183	108 274	
LDTV-150-25-5-*	25,000 55,115	725 7,107	500 1893	84 213	72 183	116 295	
LDTV-150-30-6-*	30,000 66,138	870 8,529	600 2271	84 213	72 183	124 315	

**BRYAN STEAM**

783 N. CHILI AVE  
 PERU, IND.  
 46970

DWG NO.:

A50765

	LDTV-20		LDTV-25		LDTV-30	
<b>Deaerator Design</b>						
Capacity	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)
	20000	9072	25000	11340	30000	13608
Number of Tray Columns	2		2		2	
Trays in each Column	5		5		5	
Number of Trays	10		10		10	
Style of Tray	46501		46501		46501	

<b>Pressure Vessel</b>						
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
Diameter	60	152.40	60	152.40	60	152.40
Shell Length	63.625	161.61	71.625	181.93	79.625	202.25
Head Thickness	0.375	0.95	0.375	0.95	0.375	0.95
Shell Thickness	0.375	0.95	0.375	0.95	0.375	0.95

<b>Connections/Openings</b>						
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
Tray Access Door	24	60.96	24	60.96	24	60.96
Undeaerated Water Inlet	3	7.62	3	7.62	3	7.62
Steam Inlet	6	15.24	6	15.24	6	15.24
High Temperature Return	3	7.62	3	7.62	3	7.62
Pump Suction	4	10.16	4	10.16	4	10.16
Pump Bypass	2	5.08	2	5.08	2	5.08
Overflow	3	7.62	3	7.62	3	7.62
Drain	1	2.54	1	2.54	1	2.54
Sample	1	2.54	1	2.54	1	2.54

<b>Standard Level from Bottom of Storage Tank</b>						
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
Overflow	39.5	100.33	47.5	120.65	55.5	140.97
High Level	35.5	90.17	43.5	110.49	51.5	130.81
Low Level	21	53.34	21	53.34	21	53.34
Head Seam	17.1	43.434	17.1	43.434	17.1	43.434
	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)
Overflow	415	1571	512	1938	610	2309
High Level	366	1385	464	1756	421	1593
Low Level	190	719	190	719	190	719
Head Seam	141	534	141	534	141	534