

TRAY TYPE DEAERATOR

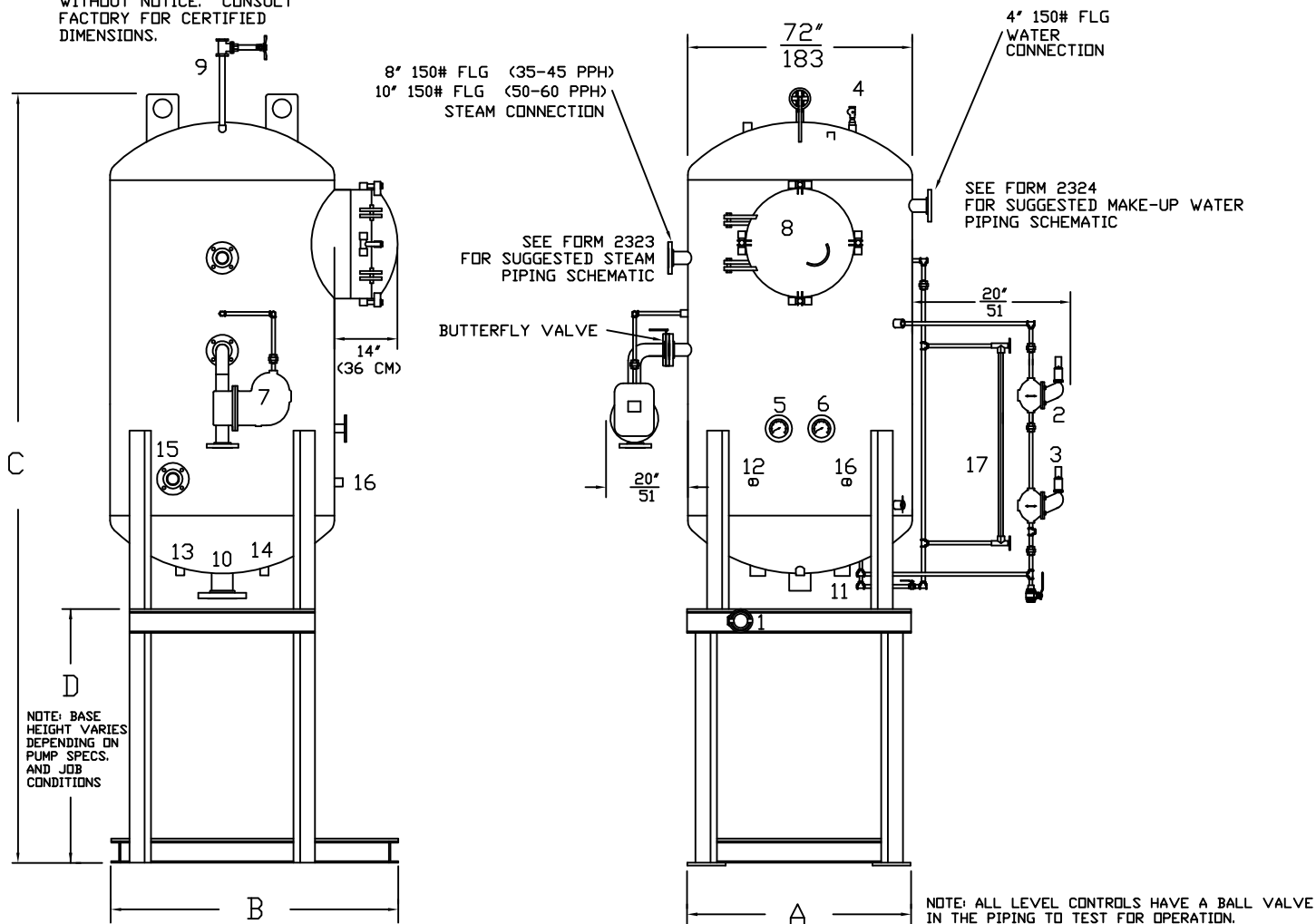
VERTICAL TANK DESIGN (35,000 PPH – 60,000 PPH)

EFFECTIVE DATE: 5/5/15

REPLACES: 10/4/05

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 | 6. PRESSURE GAUGE | 11. 3" NPT PUMP BYPASS | 16. 1" NPT MAGNESIUM ANODE |
| 2. HIGH LEVEL CONTROL | 7. 3" NPT OVERFLOW TRAP | 12. 1" NPT CHEMICAL PORT | 17. GAUGE GLASS |
| 3. LOW LEVEL CONTROL | 8. 24" DIA. TRAY ACCESS DOOR | 13. 2" NPT DRAIN | 18. RELIEF VALVE ** |
| 4. VACUUM BREAKER | 9. 1-1/2" NPT VENT | 14. 1" NPT SAMPLE PORT | 19. PRESSURE REDUCING VALVE ** |
| 5. TEMPERATURE GAUGE | 10. 6" FLG PUMP SUCTION | 15. 3" 150# FLG HIGH TEMPERATURE CONDENSATE RETURN | 20. MAKE-UP WATER ** |
- ** SHIPPED LOOSE, NOT SHOWN

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	(D) OVER-ALL BASE HEIGHT	
DTV-150-35-7-*	35,000 15,876	1015 10,011	700 2650	72 183	84 213	170 432	BASE DIMENSIONS WILL CHANGE DEPENDING ON PUMP SELECTION AND JOB CONDITIONS. CONSULT FACTORY FOR BASE DIMENSIONS.	
DTV-150-40-8-*	40,000 18,144	1160 11,371	800 3028	72 183	84 213	176 447		
DTV-150-45-9-*	45,000 20,412	1304 12,783	900 3407	72 183	84 213	182 463		
DTV-150-50-10-*	50,000 22,680	1449 14,205	1000 3785	72 183	84 213	188 478		
DTV-150-60-12-*	60,000 27,216	1739 17,067	1200 4542	72 183	84 213	199 506		

BRYAN STEAM

783 N. CHILI AVE
PERU, INDIANA
46970

FORM NO.:

2184

	DTV-35		DTV-40		DTV-45		DTV-50		DTV-60	
Deaerator Design										
Capacity	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)
	35000	15880	40000	18149	45000	20417	50000	22686	60000	27223
Number of Tray Columns	3		3		3		3		3	
Trays in each Column	5		5		6		6		7	
Number of Trays	15		15		18		18		21	
Style of Tray	46501		46501		46501		46501		46501	
Pressure Vessel										
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
Diameter	72	182.88	72	182.88	72	182.88	72	182.88	72	182.88
Shell Length	69	175.26	75	190.50	81	205.74	87	220.98	102	259.08
Head Thickness	0.375	0.95	0.375	0.95	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	0.375	0.95	0.375	0.95
Connections/Opening										
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
Tray Access Door	24	60.96	24	60.96	24	60.96	24	60.96	24	60.96
Undeaeerated Water Inlet	4	10.16	4	10.16	4	10.16	4	10.16	4	10.16
Steam Inlet	8	20.32	8	20.32	8	20.32	10	25.4	10	25.4
High Temperature Return	3	7.62	3	7.62	3	7.62	3	7.62	3	7.62
Pump Suction	6	15.24	6	15.24	6	15.24	6	15.24	6	15.24
Pump Bypass	3	7.62	3	7.62	3	7.62	3	7.62	3	7.62
Overflow	3	7.62	3	7.62	3	7.62	3	7.62	3	7.62
Drain	2	5.08	2	5.08	2	5.08	2	5.08	2	5.08
Sample	1	2.54	1	2.54	1	2.54	1	2.54	1	2.54
Standard Level from Bottom of Storage Tank										
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
Overflow	47	119.38	53	134.62	58	147.32	64	162.56	75	190.50
High Level	46	116.84	52	132.08	57	144.78	63	160.02	74	187.96
Low Level	8	20.32	8	20.32	8	20.32	8	20.32	8	20.32
Head Seam	17	43.18	17	43.18	17	43.18	17	43.18	17	43.18
	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)
Overflow	720	2725	826	3126	914	3459	1020	3861	1213	4591
High Level	702	2657	808	3058	896	3391	1002	3793	1196	4527
Low Level	45	170	45	170	45	170	45	170	45	170
Head Seam	191	723	191	723	191	723	191	723	191	723