

TRAY TYPE DEAERATOR

SEPARABLE TANK DESIGN: (125,000 PPH – 300,000 PPH)

EFFECTIVE DATE: 05/15/15

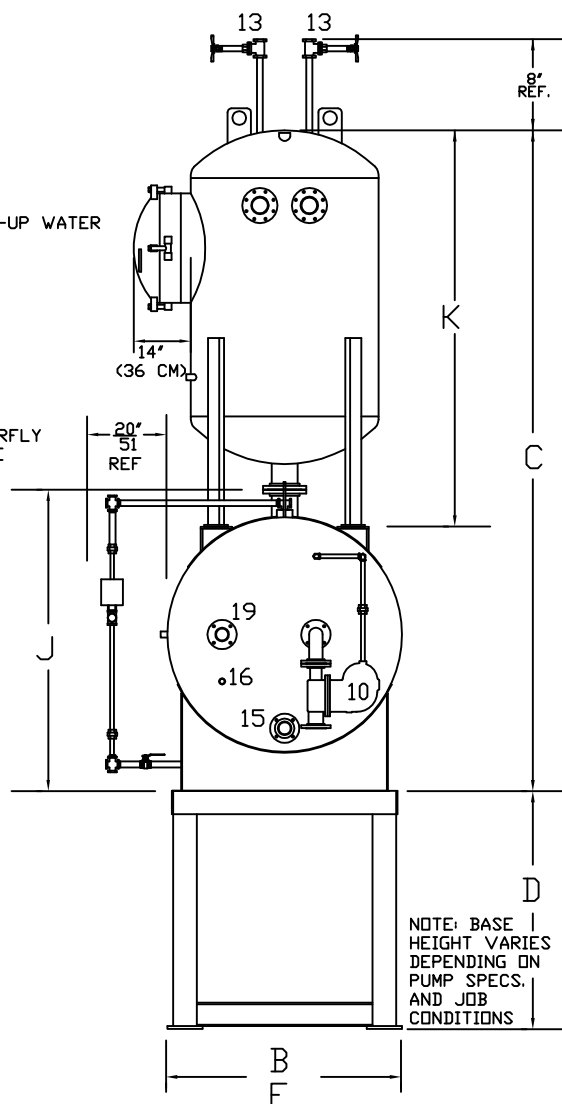
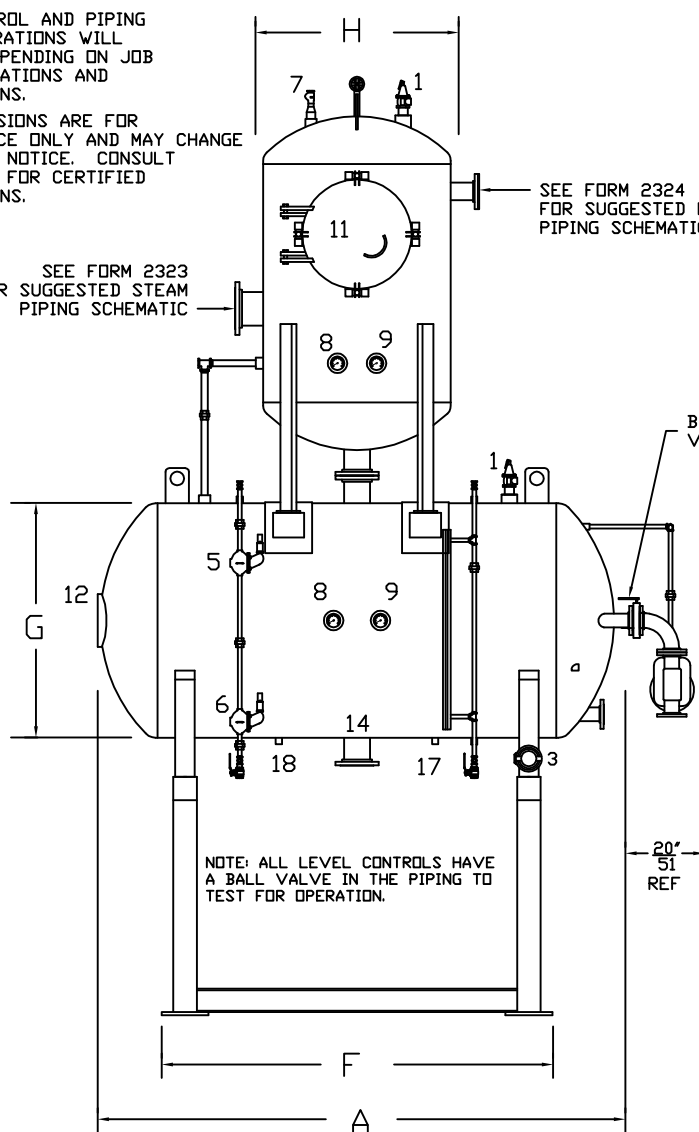
REPLACES: 06/1/05

NOTES:

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

SEE FORM 2323
FOR SUGGESTED STEAM
PIPING SCHEMATIC

SEE FORM 2324
FOR SUGGESTED MAKE-UP WATER
PIPING SCHEMATIC



NOTE: 'B' AND 'E' MAY NOT BE
THE SAME DIMENSION.

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

MODEL	CAPACITY			DIMENSIONS									
	LBS/HR Kg/HR	BOILER HP KW	(STORAGE) GALLONS LITERS	DOES NOT INCLUDE THE BASE			(D),(E),(F) BASE DIMENSIONS	(G) STORAGE TANK DIA.	(H) DEAERATOR TANK DIA.	(J) STORAGE TANK HEIGHT	(K) DEAERATOR TANK HEIGHT		
* = # OF PUMPS				(A) OVER-ALL LENGTH	(B) OVER-ALL WIDTH	(C) OVER-ALL HEIGHT							
DTA-150-125-25-*	125,000 56,697	3,620 36,625	2,500 9,462	167 424	72 183	204 518	BASE DIMENSIONS WILL CHANGE DEPENDING ON PUMP SELECTIONS, AND JOB CONDITIONS	72 183	54 137	88 224	125 318		
DTA-150-150-30-*	150,000 68,037	4,350 43,950	3,000 11,355	197 500	72 183	191 485		72 183	66 168	88 224	114 290		
DTA-150-175-35-*	175,000 79,377	5,070 51,274	3,500 13,247	227 577	72 183	199 505		72 183	66 168	88 224	122 310		
DTA-150-200-40-*	200,000 90,716	5,800 58,599	4,000 15,140	204 518	84 213	221 561	CONSULT FACTORY FOR BASE DIMENSIONS	84 213	72 183	105 267	125 318		
DTA-150-250-50-*	250,000 113,395	7,245 73,249	5,000 18,925	246 625	84 213	237 602		84 213	72 183	105 267	141 358		
DTA-150-300-60-*	300,000 136,075	8,695 87,899	6,000 22,710	235 597	96 244	238 605		96 244	84 213	121 307	143 363		

BRYAN STEAM

783 N. CHILI AVE
PERU, INDIANA 46970

FORM NO.1

2037

	DTA-125		DTA-150		DTA-175		DTA-200		DTA-250		DTA-300	
Deaerator Design												
Capacity	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)
	125000	275575	150000	330690	175000	385805	200000	440920	250000	551150	300000	661380
Number of Tray Columns	4		6		6		8		8		8	
Trays in each Column	16		12		14		12		16		18	
Number of Trays	64		72		84		96		128		144	
Style of Tray	46502		46502		46502		46502		46502		46502	
Pressure Vessel (upper section)												
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	54	137.16	66	167.64	66	167.64	72	182.88	72	182.88	84	213.36
Shell Length	82	208.28	70	177.8	78	198.12	69	175.26	85	215.9	76.88	195.26
Head Thickness	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.5	1.27
Shell Thickness	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.5	1.27
Pressure Vessel (lower section)												
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	72	182.88	72	182.88	72	182.88	84	213.36	84	213.36	96	243.84
Shell Length	126	320.04	156	396.24	186	472.44	165	419.1	207	525.78	188	477.52
Head Thickness	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.5	1.27	0.5	1.27	0.5	1.27
Shell Thickness	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.5	1.27	0.5	1.27	0.5	1.27
Connections/Opening												
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	24	60.96	24	60.96	24	60.96	24	60.96	24	60.96	24	60.96
Undeaeerated Water Inlet	6	15.24	6	15.24	6	15.24	6	15.24	8	20.32	8	20.32
Steam Inlet	16	40.64	18	45.72	18	45.72	20	50.8	24	60.96	24	60.96
High Temperature Return	4	10.16	4	10.16	4	10.16	6	15.24	6	15.24	6	15.24
Pump Suction	10	25.4	10	25.4	10	25.4	12	30.48	12	30.48	12	30.48
Pump Bypass	4	10.16	4	10.16	4	10.16	4	10.16	4	10.16	4	10.16
Overflow	4	10.16	4	10.16	4	10.16	6	15.24	6	15.24	6	15.24
Drain	2	5.08	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	1	2.54
Standard Level from Bottom of Storage Tank												
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	66	167.64	66	167.64	66	167.64	72	182.88	72	182.88	84	213.36
High Level	64	162.56	64	162.56	64	162.56	70	177.8	70	177.8	82	208.28
Low level	6	15.24	6	15.24	6	15.24	6	15.24	6	15.24	6	15.24
	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)
	2503	9474	3010	11393	3517	13312	4083	15454	5111	19345	6162	23323
High Level	2425	9179	2916	11037	3406	12892	3942	14920	4932	18668	5987	22661
Low Level	92	348	113	428	134	507	131	496	166	628	159	602