

TRAY TYPE DEAERATOR

SEPARABLE TANK DESIGN: (70,000 PPH – 100,000 PPH)

EFFECTIVE DATE: 05/15/15

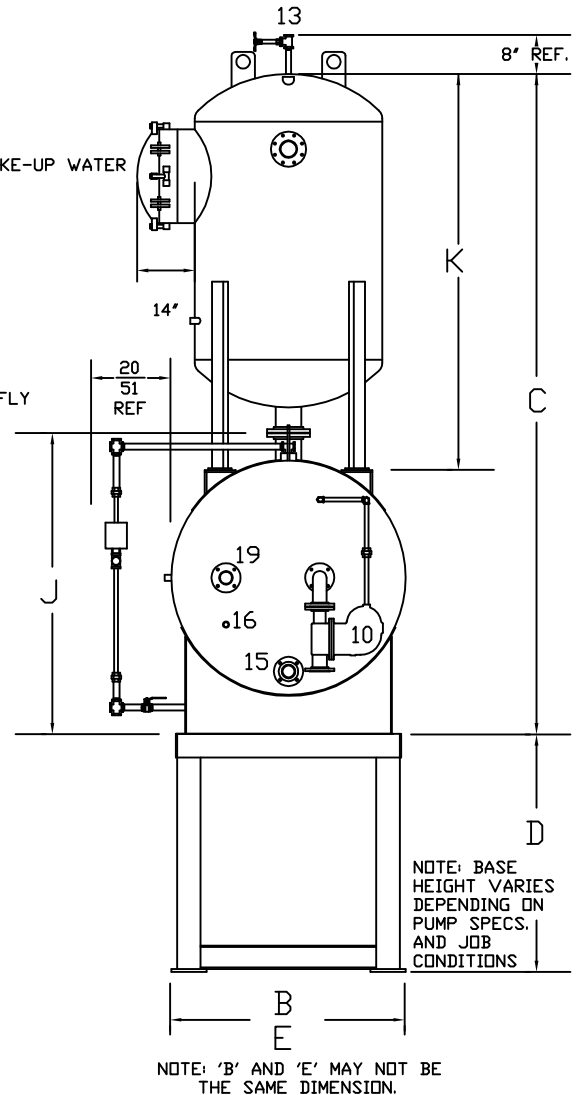
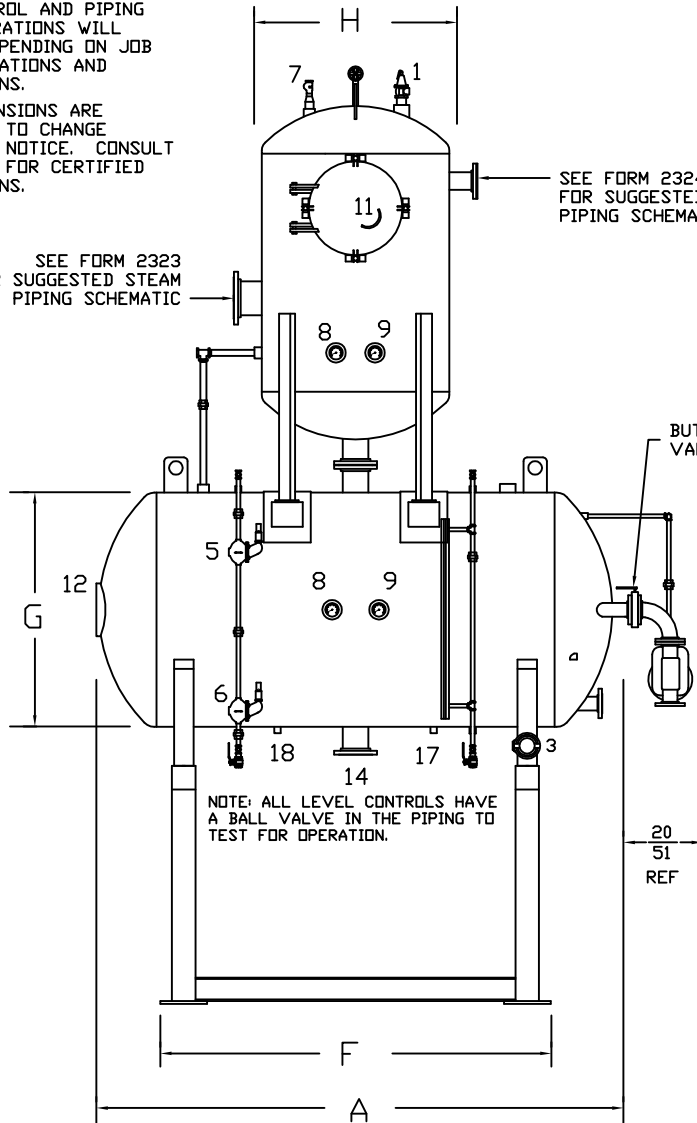
REPLACES: 06/1/05

NOTES:

1. CONTROL AND PIPING CONFIGURATIONS WILL VARY DEPENDING ON JOB SPECIFICATIONS AND CONDITIONS.
2. DIMENSIONS ARE SUBJECT TO 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



- | | | | | |
|-------------------------------|-----------------------|----------------------|-------------------|--|
| 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-150-70-14-*	70,000 31,751	2,030 19,913	1,400 5,299	156 396	60 152	171 434	BASE DIMENSIONS WILL CHANGE DEPENDING ON PUMP SELECTIONS, AND JOB CONDITIONS CONSULT FACTORY FOR BASE DIMENSIONS	60 152	48 122	76 193	104 264
DTA-150-80-16-*	80,000 36,287	2,320 22,758	1,600 6,056	174 442	60 152	175 445		60 152	48 122	76 193	108 274
DTA-150-90-18-*	90,000 40,823	2,610 25,602	1,800 6,813	160 406	66 168	173 439		66 168	54 137	82 208	101 257
DTA-150-100-20-*	100,000 45,359	2,900 28,447	2,000 7,570	175 445	66 168	181 460		66 168	54 137	82 208	109 237

BRYAN STEAM

783 N. CHILI AVE
PERU, INDIANA 46970

FORM NO.1

2007

	DTA-70		DTA-80		DTA-90		DTA-100	
Deaerator Design								
Capacity	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)	(pph)	(Kg/Hr)
	70000	31751	80000	36287	90000	40823	100000	45359
Number of Tray Columns	2		2		4		4	
Trays in each Column	12		13		10		11	
Number of Trays	24		26		40		44	
Style of Tray	46501		46501		46502		46502	
Pressure Vessel (upper section)								
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	48	121.92	48	121.92	54	137.16	54	137.16
Shell Length	65	165.1	69	175.26	58	147.32	66	167.64
Head Thickness	0.3125	0.79375	0.3125	0.79375	0.375	0.9525	0.375	0.9525
Shell Thickness	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.375	0.9525
Pressure Vessel (lower section)								
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	60	152.4	60	152.4	66	167.64	66	167.64
Shell Length	120	304.8	138	350.52	123	312.42	138	350.52
Head Thickness	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.375	0.9525
Shell Thickness	0.375	0.9525	0.375	0.9525	0.375	0.9525	0.375	0.9525
Connections/Openings								
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	24	60.96	24	60.96	24	60.96	24	60.96
Undeaerated Water Inlet	4	10.16	4	10.16	6	15.24	6	15.24
Steam Inlet	10	25.4	10	25.4	10	25.4	10	25.4
High Temperature Return	4	10.16	4	10.16	4	10.16	4	10.16
Pump Suction	6	15.24	6	15.24	8	20.32	8	20.32
Pump Bypass	4	10.16	4	10.16	4	10.16	4	10.16
Overflow	4	10.16	4	10.16	4	10.16	4	10.16
Drain	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
Standard Level from Bottom of Storage Tank								
	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
	48	121.92	48	121.92	54	137.16	54	137.16
High Level	46	116.84	46	116.84	52	132.08	52	132.08
Low level	6	15.24	6	15.24	6	15.24	6	15.24
	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)
	1469	5560	1658	6276	1831	6930	2025	7665
High Level	1384	5238	1561	5908	1738	6578	1922	7275
Low level	80	303	92	348	86	326	96	363