

SPRAY TYPE DEAERATOR

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

EFFECTIVE DATE: 05/05/15

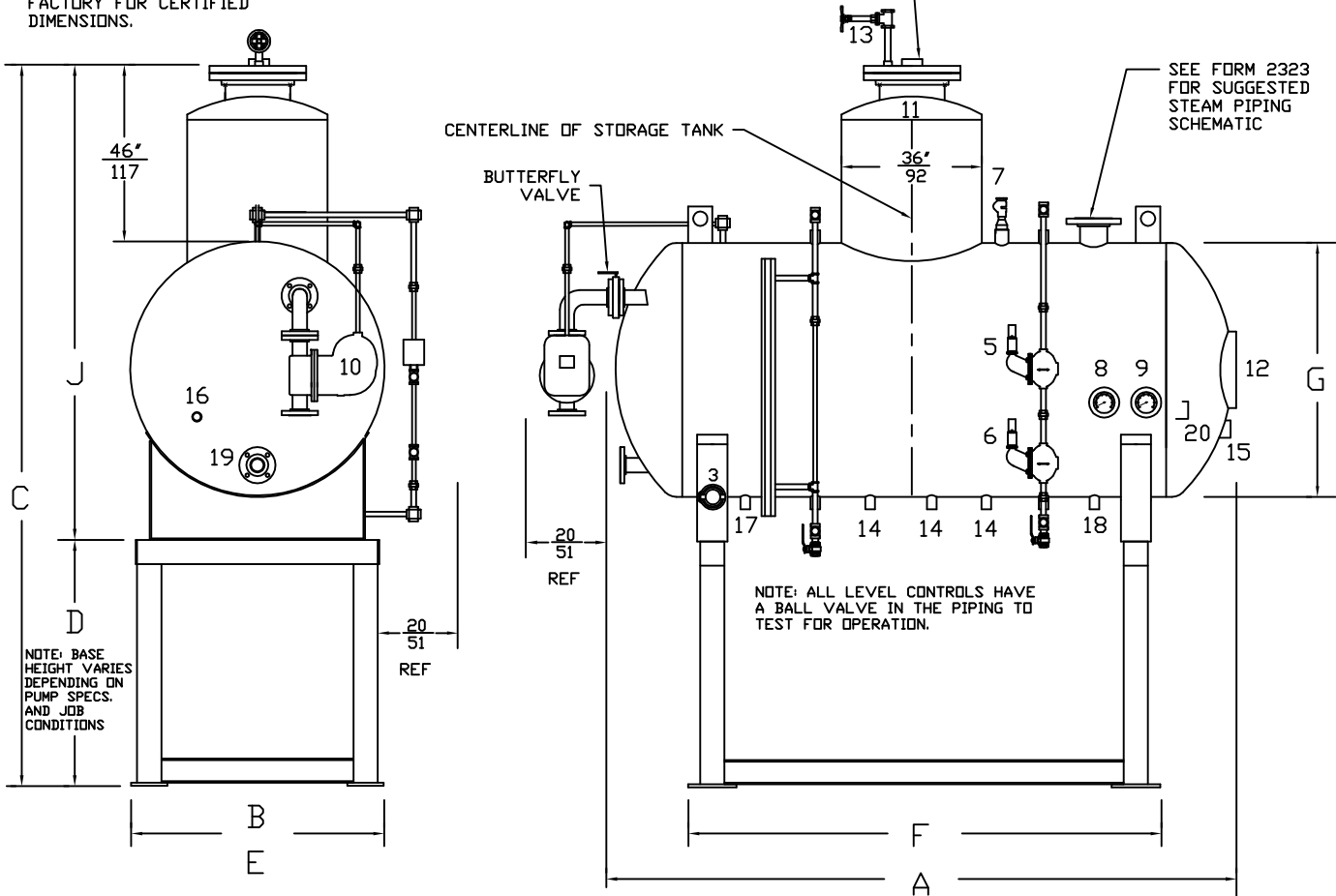
REPLACES: 06/01/05

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 2324 FOR SUGGESTED MAKE-UP WATER PIPING SCHEMATIC

SEE FORM 2323 FOR SUGGESTED STEAM PIPING SCHEMATIC



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|-------------------------------|-----------------------|-------------------|-------------------|--|
| 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. SPRAY VALVES | 15. PUMP BYPASS | 19. HIGH TEMPERATURE CONDENSATE RETURN |
| 4. MAKE-UP WATER VALVE ** | 8. TEMPERATURE GAUGE | 12. MANWAY ACCESS | 16. CHEMICAL PORT | 20. MAGNESIUM ANODE |
- ** SHIPPED LOOSE, NOT SHOWN

MODEL	CAPACITY			DIMENSIONS							
	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	(E) OVER-ALL BASE WIDTH	(F) OVER-ALL BASE LENGTH	(G) TANK DIAMETER	(J) VESSEL HEIGHT
DST-150-35-7-*	35,000 15,876	1015 9,961	700 2,650	120 305	48 122	153 388	BASE DIMENSIONS WILL CHANGE DEPENDING ON PUMP SELECTION AND JOB CONDITIONS. CONSULT FACTORY FOR BASE DIMENSIONS.	48 122	86' 218	48 122	105 267
DST-150-40-8-*	40,000 18,144	1159 11,374	800 3,028	134 340	48 122	153 388		48 122	100 254	48 122	105 267
DST-150-45-9-*	45,000 20,412	1304 12,796	900 3,407	120 305	54 137	159 399		54 137	85 216	54 137	110-1/2 281
DST-150-50-10-*	50,000 22,680	1449 14,220	1000 3,785	133-1/2 339	60 152	165-1/2 420		60 152	78 198	60 152	117 297
DST-150-60-12-*	60,000 27,216	1739 17,066	1200 4542	157-1/2 400	60 152	165-1/2 420		60 152	120 305	60 152	117 297

BRYAN STEAM LLC

783 N. CHILI AVE
PERU, INDIANA 46970

FORM NO.:

2060

	DST-35		DST-40		DST-45		DST-50		DST-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 Spray Valves	2		2		2		2		2	
Style of Spray Valve	29660		29660		29660		29660		29660	
Pressure Vessel										
Storage Tank	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)	(in.)	(cm.)
Diameter	48	121.92	48	121.92	54	137.16	60	152.4	60	152.4
Shell Length	86	218.44	100	254	85	215.9	78	198.12	120	304.8
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
Deaerator Diameter	36	91.44	36	91.44	36	91.44	36	91.44	36	91.44
Deaerator Head Thickness	0.375	0.95	0.375	0.95	0.375	0.95	0.375	0.95	0.375	0.95
Deaerator 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.)
Spray Valve Access	16	40.64	16	40.64	16	40.64	16	40.64	16	40.64
Storage Access	12x16	30.5x40.6	12x16	30.5x40.6	12x16	30.5x40.6	12x16	30.5x40.6	12x16	30.5x40.6
Undeaerated 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	3	7.62	3	7.62	3	7.62	3	7.62	3	7.62
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	41	104.14	41	104.14	47	119.38	53	134.62	53	134.62
High Level	40	101.6	40	101.6	46	116.84	52	132.08	52	132.08
Low Level	4	10.16	4	10.16	4	10.16	4	10.16	4	10.16
	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)	(gallons)	(liters)
Overflow	712	2695	812	3073	917	3471	1010	3823	1216	4603
High Level	697	2638	795	3009	902	3414	996	3770	1199	4538
Low Level	31	117	35	132	32	121	29	110	36	136