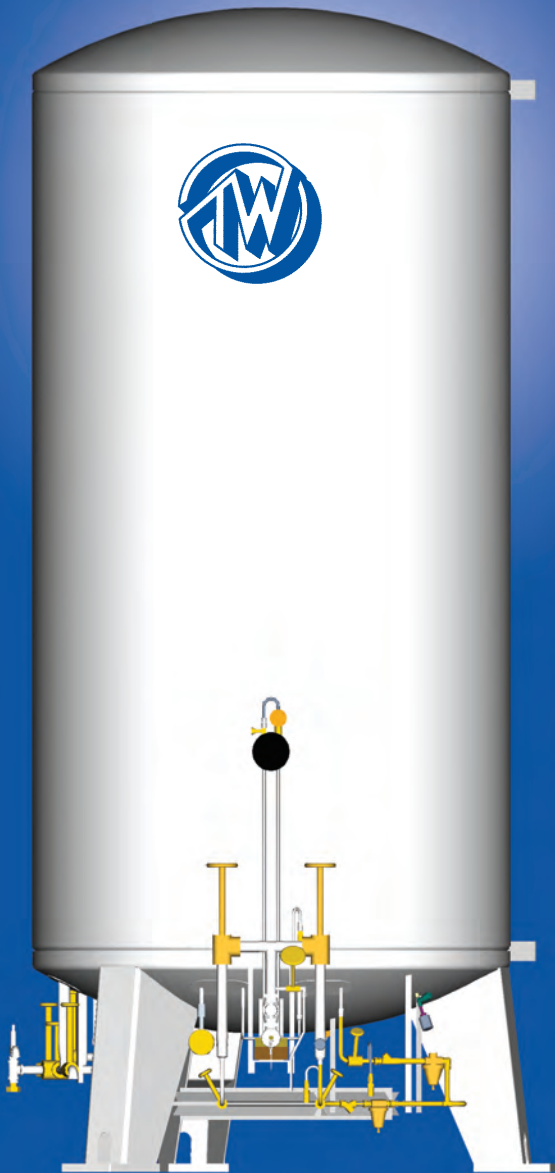










Taylor-Wharton

# Cryogenic Bulk Tanks

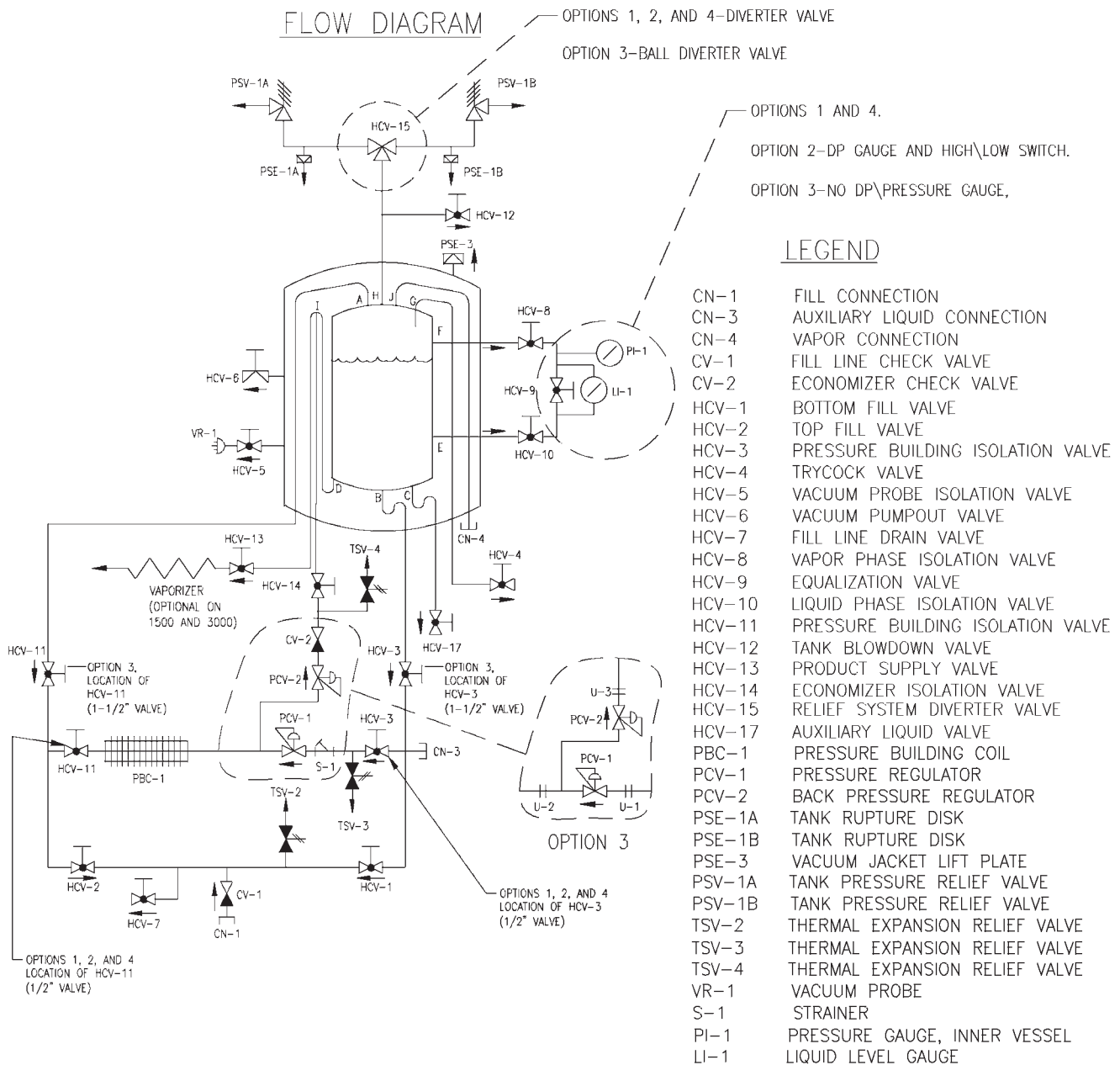
## Cryogenic Vertical Tanks *The New Standard in Bulk Storage*



-  Maximum Design Flexibility  
= extensive custom options
-  One Lift Placement Process  
= minimum installation cost
-  Optimized Piping Design  
= ease of operation
-  Accessible Valves and Controls  
= simplified maintenance
-  Wide Line Spacing  
= superior performance
-  Enlarged Vessel Safety Line  
= unparalleled operational safety



# VERTICAL Flow Diagram TANKS



## OPTIONS & ACCESSORIES

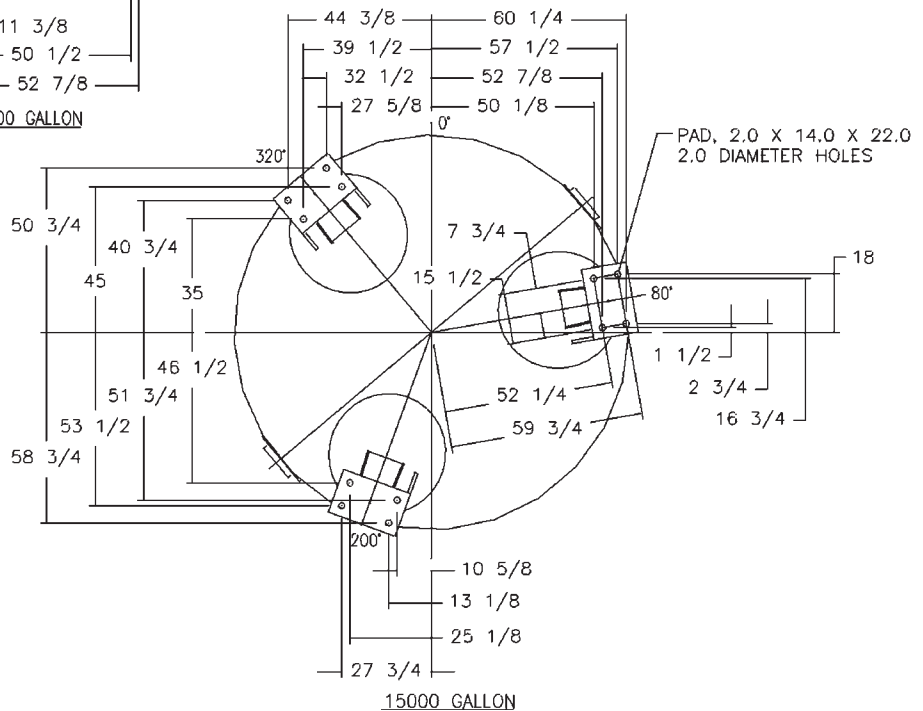
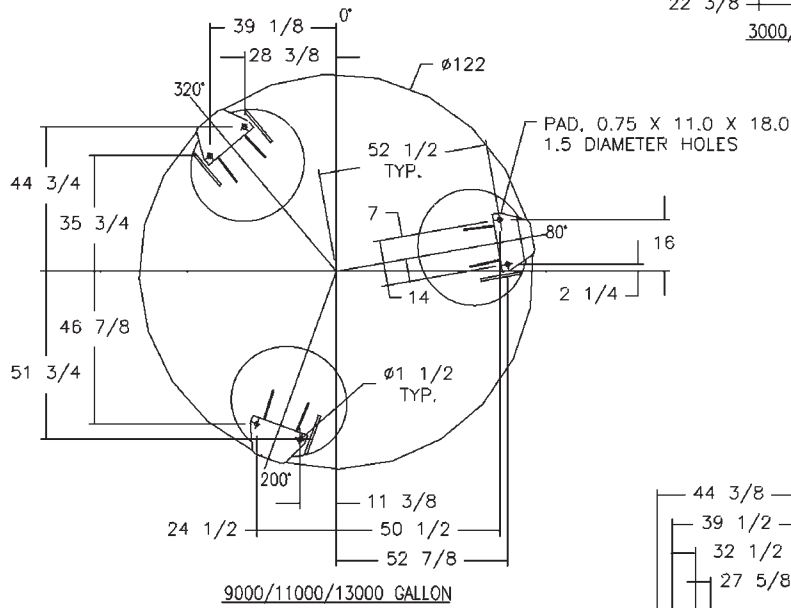
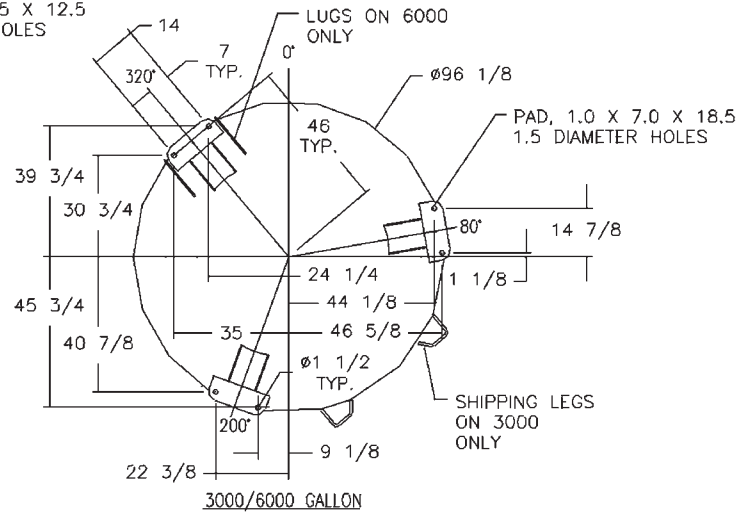
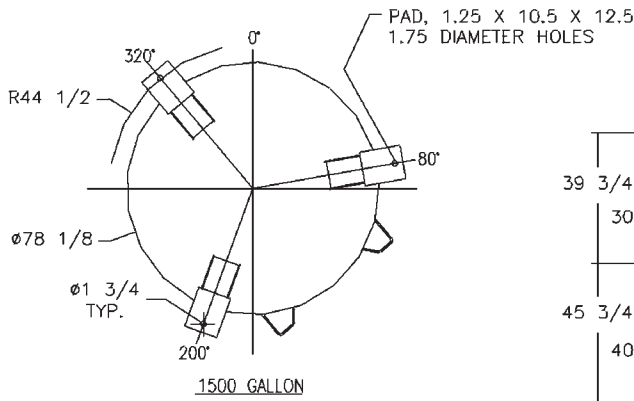
- TELEMETRY SYSTEMS
- FINAL LINE HOSPITAL MANIFOLD (4000 SCFH)
- FINAL LINE INDUSTRIAL MANIFOLD (4000 SCFH)
- HIGH/LOW ALARM FOR LIQUID LEVEL GAUGE
- SAFETY DEVICE TEST VALVE
- AUXILIARY GAS CONNECTION OR VALVE (LINE A)
- AUXILIARY LIQUID VALVE (CN-3)
- 1/2" PUMP RETURN GATE VALVE (CN-4)
- 1-1/2" THREADED CGA FILL FITTING
- 1/4" AUXILIARY LIQUID LEVEL LINE PRESSURE TAPS

## LINE SIZES

LINESIZE/TANK VOLUME	1500	3000	6000	9000	11000	13000	15000
TOP FILL (A)	1	1 1/2	1 1/2	2	2	2	2
BOTTOM FILL (B)	1	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
LIQUID AUXILIARY (C)	1	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
SIPHON WITHDRAWAL (D)	1	1	1	1 1/2	1 1/2	1 1/2	1 1/2
LIQUID INSTRUMENT (E)	3/8	3/8	3/8	3/8	3/8	3/8	3/8
GAS INSTRUMENT (F)	1/4	1/4	1/4	1/4	1/4	1/4	1/4
FULL TRYCOCK (G)	3/8	3/8	3/8	3/8	3/8	3/8	3/8
SAFETY (H)	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
ECONOMIZER RETURN (I)	1/4	1/4	1/4	1/2	1/2	1/2	1/2
PUMP RETURN (J)	1/2	1/2	1/2	1	1	1	1



# VERTICAL Foot Pads & TANKS Dimensions





# VERTICAL TANK Specifications

## SPECIFICATIONS

TANK VOLUME		1,500	3,000	6,000	9,000	11,000	13,000	15,000
<b>CAPACITY</b>								
WARM WATER VOL.	gal	1,585	3,120	6,020	9,290	11,300	13,300	15,360
	liter	6,000	11,810	22,788	35,166	42,775	50,346	58,142
NET, LIQUID	gal	1,490	3,000	5,880	9,240	11,000	13,000	14,800
	liter	5,640	11,356	22,258	34,977	41,640	49,210	56,023
<b>DIMENSIONS</b>								
HEIGHT	ft-in	15-9	15-11	26-2	26-10	31-5	36-0	40-6
	m	4.8	4.9	8.0	8.2	9.6	11.0	12.3
DIAMETER	ft-in	*6-6	*8-0	*8-0	*10-2	*10-2	*10-2	*10-2
	m	1.9	2.4	2.4	3.1	3.1	3.1	3.1
<b>WEIGHT</b>								
TARE	1,000 lb	10,500	15,500	27,900	42,000	47,000	53,000	73,700
	1,000 kg	4,763	7,031	12,655	19,051	21,319	24,081	33,430
OXYGEN	1,000 lb	24,800	44,100	83,900	129,990	152,000	174,000	214,700
	1,000 kg	11,249	20,003	38,056	58,962	68,946	78,925	97,386
NITROGEN	1,000 lb	20,600	35,700	67,700	104,358	121,000	138,000	173,500
	1,000 kg	9,344	16,193	30,708	47,336	54,885	62,596	78,698
ARGON	1,000 lb	28,000	50,400	96,300	149,434	175,000	201,000	245,700
	1,000 kg	12,700	22,861	43,680	67,782	79,379	91,172	111,448
<b>PERFORMANCE</b>								
Nominal Evaporation O <sub>2</sub> (% capacity/day)**		0.35	0.35	0.25	0.18	0.18	0.18	0.18
Maximum Working Pressure (psig) (bar/kPa)		250 17.2 / 1724						

\*\* Based on net liquid capacity

Taylor-Wharton's new generation vertical bulk tanks are engineered for maximum flexibility and minimum installation cost. The new T-W footpad design makes installation a one-lift process saving time and resources. Our optimized piping design makes operating and maintaining a bulk tank easier than ever. Readily accessible valves and controls provide ample clearance, facilitate operation and simplify maintenance procedures. Wide line spacing and superior performance meet the flow requirements of a complete range of gas and liquid applications.

Taylor-Wharton bulk tanks are designed and manufactured to the highest quality standards. The pressure vessel is ASME, Section VIII, Division I, and is Canadian (CRN) and Chinese pressure vessel approval. All of Taylor-Wharton's world-class cryogenic tank facilities are ISO 9001 approved.



Taylor-Wharton

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