



Taylor-Wharton

Equipping The Hydrogen Infrastructure

MicroBulk

Why Buy Taylor-Wharton MicroBulk?

Taylor-Wharton understands the evolving needs of customers and have leveraged their cryogenic experience to provide a premium new MicroBulk offering.

- Stock Inventory of Standard Models for Immediate Shipment.
- Standard Sizes (1000 - 5000 Liters) and a Broad Range of Working Pressures.
- Quality Materials: Durable Stainless Steel, Super Insulation, Upgraded Components.
- Units Can Be Filled with any and All Cryogenic Delivery Trucks.
- Reliable: Built to Last, 5 Year Vacuum Warranty.
- High Quality Stainless Steel Pallet - Rust Free & Environmentally Conscious.
- 3,500 SCFH Gaseous Flow Rates as Standard Skid Package; 3x Higher Flow Rates Compared to Previous MB Designs.
- Isolation and Extended Stem Cryogenic Valves Included as Standard Features.



MicroBulk Tank Specifications

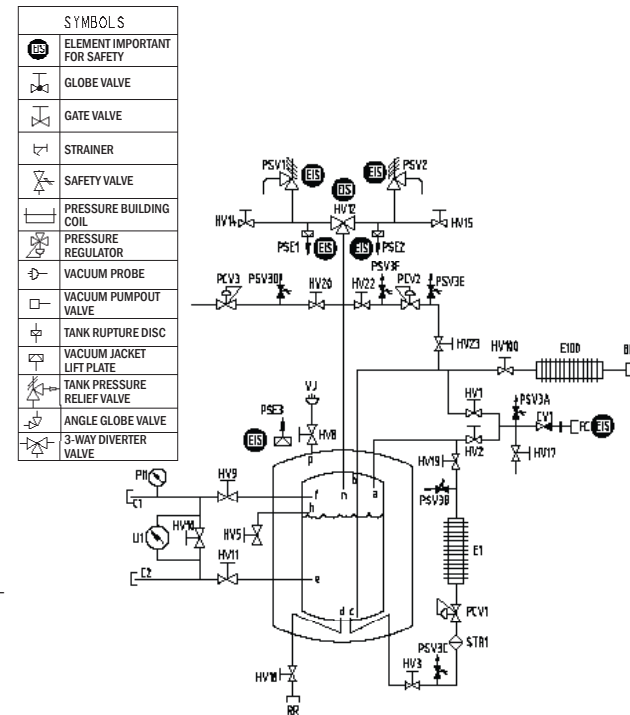
PART/MODEL NO.	M1000/V1000	M2000/V2000	M3000/V3000	M5000/V5000
MAWP PSI (MPa)	250 (1.72)/500 (3.45)	250 (1.72)/500 (3.45)	250 (1.72)/500 (3.45)	250 (1.72)/508 (3.5)
Operation Pressure PSI (MPa)	174 (1.2)/435 (3.0)	174 (1.2)/435 (3.0)	174 (1.2)/435 (3.0)	174 (1.2)/435 (3.0)
Gross Capacity US gallon (m ³)	280 (1.06)	568 (2.15)	782 (2.96)	1320 (5)
Net Capacity US gallon (m ³)	251 (0.95)	512 (1.94)	713 (2.7)	1189 (4.5)
Estimated tare weight Lbs (kg)	2315 (1050) 2469 (1120)	3660 (1660) 3858 (1750)	3968 (1800) 4806 (2180)	6173(2800) 7826(3550)
Weight with full medium Lbs (kg)	4008 (1818)	7108 (3224)	8706 (3949)	14176 (6430)
LIN	4162 (1888)	7306 (3314)	9544 (4329)	15829(7180)
LOX	4705 (2134)	8530 (3869)	10659 (4835)	17483(7930)
LAr	4859 (2204)	8728 (3959)	11497 (5215)	19121(8673)
	5232 (2373)	9606 (4357)	12136 (5505)	19963(9055)
	5386 (2243)	9804 (4447)	12974 (5885)	21616(9805)
Tank Diameter Inches (mm)	43.3 (1100)	53.1 (1350)	59.0 (1500)	79.4 (2016)
Pallet Depth Inches (mm)	61.0 (1550)	70.9 (1800)	74.0 (1880)	99.6 (2530)
Pallet Width Inches (mm)	61.0 (1550)	70.9 (1800)	78.7 (2000)	86.6 (2200)
Pallet Height Inches (mm)	90 (2290)	109.4 (2779)	110 (2804)	118.1 (3000)
Max N2 Withdrawal Rate SCFH (NM ³ /h)	1766 (50)	3531 (100)	3531 (100)	3531 (100)

*Includes pallet. All specifications are nominal.

Piping and Instrument Legend

a	TOP FILL LINE 1/2" (1000 THRU 3000-LITERS)	PI1	TANK PRESSURE GAUGE, G 1/2"
a	TOP FILL LINE 1" (5000-LITER)	LI1	LIQUID LEVEL GAUGE, 1/4" FNPT
b	BOTTOM FILL LINE 1/2" (1000 THRU 3000-LITERS)	HV17	FILL LINE PURGE VALVE, 1/2" SW
b	BOTTOM FILL LINE 1" (5000-LITER)	PCV2	ECONOMIZER REGULATOR VALVE, 1/4"
c	LIQUID WITHDRAWAL LINE, 1/2"	FNPT	
d	LIQUID WITHDRAWAL LINE, 1/2"	PCV3	BACK PRESSURE REGULATOR VALVE, 1/4" FNPT
e	LIQUID INSTRUMENT LINE, 3/8" OD	HV10	EQUALIZATION VALVE, 1/4" MNPT
f	GAS INSTRUMENT LINE, 3/8" OD	HV11	LIQUID ISOLATION VALVE, 1/4" MNPT
h	FULL TRYCOCK LINE, 1/2"	HV9	GAS ISOLATION VALVE, 1/4" MNPT
n	SAFETY VENT LINE, 1/2"	E1	PRESSURE BUILDUP COIL
t	VACUUM PUMPOUT LINE & JACKET RELIEF DEVICE, 1/2"	PCV1	PRESSURE REGULATOR, 1/4" FNPT
P	VACUUM PROBE, 1/8"	RR	LIQUID CONNECTION, 1/2" FNPT
HV1	FILLING LIQUID BOTTOM VALVE, 1/2"	PSV1&2	SAFETY VALVE, 1/2" FNPT
HV2	FILLING GAS TOP VALVE, 1/2"	PSV3A	THERMAL EXPANSION VALVE, 1/4" MNPT
HV5	FULL TRYCOCK VALVE, 1/2"	PSV3F	THERMAL EXPANSION VALVE, 1/4" MNPT
HV100	GAS SUPPLY VALVE, 1/2"	HV3	PRESSURE BUILDUP VALVE, 1/2" SW
HV18	BOTTOM LIQUID VALVE, 1/2"	HV14&15	SAFETY LINE PURGE VALVE, 1/4" MNPT
BR	GAS SUPPLY CONNECTION, 1/2" + 1/2" FNPT	E100	ATMOSPHERIC VAPORIZER
PSE3	VACUUM PUMP & VACUUM BURSTING DISC, 1 1/2"	VJ	VACUUM PROBE, 1/8" MVPT
C1	INSTRUMENT GAS CONNECTION, 1/4" FNPT	HV8	VACUUM PROBE VALVE, 1/8" FNPT
C2	INSTRUMENT LIQUID CONNECTION, 1/4" FNPT	STR1	STRAINER, 1/2" SW
PSE1&2	BURSTING DISC, 1/2" MNPT	FC	FILLING CONNECTION, 1 1/2"
HV12	SAFETY CHANGEOVER VALVE, BRONZE	CV1	CHECK VALVE FILL PORT. 1/2" FNPT (1000 THRU 3000-LITERS)
		CV1	CHECK VALVE FILL PORT. 1" FNPT (5000-LITER)
		HV19	ISOLATION VALVE FOR PBU, 1/2" SW
		HV20	ISOLATION VALVE FOR PVC2, 1/2" FNPT
		HV22	ISOLATION VALVE FOR PVC3, 1/2" FNPT
		HV23	ISOLATION VALVE FOR PVC3, 1/2" FNPT

Piping and Instrument Diagram (1000-5000 liter units)



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