

VCC | VCT | VTH Series

Vertical Cold Converter Tanks

Vertical Thermosyphon Tanks



CRYOGAS INDUSTRIES

Cryogas Equipment Pvt. Ltd. Provide state-of-art cryogenic storage equipment offering multiple options to address a wide variety of application; Vertical Cryogenic Storage Tanks are offered in a variety of ranges with MAWP of 17 Bar (» 250 PSIG), 22 Bar (» 312 PSIG), 23 Bar (» 327 PSIG) and other higher pressure as per customer requirement.

VCC | VCT : Vertical Cryogenic Cold Converter Storage Tanks Gas Supply

VTH | VCT : Vertical Cryogenic Thermosyphon Storage Tanks for Cylinder

Filling Application

The design reduces product loss owing to its excellent insulation properties, coupled with new generation vacuum system and vacuum retention techniques.

Vertical Cryogenic Storage Tanks, designed in accordance with ASME coded vessel ("U" Stamp), European Pressure Directives, PED 2014/68/EU and EN 13458 and enables use for worldwide applications.

- **VCC, VCT, and VTH** ranges provide different sizes and tank volumes utilizing various diameters. The main advantage to users and Industrial Gas Companies is an augmentation of higher volume tanks on the same footprint.
- World-class components and valves for world-class performance and reliability coupled with product uniformity reduce lifetime ownership cost.
- Cryogenic Valves, Pressure Building Coil, Safety Tree arrangement with two safety valves + two bursting discs and three-way valve, Stainless Steel pipes and Stainless Steel valves offer the highest performance with long life and functional reliability. Stainless Steel interconnecting piping and welded ends are standard features.
- Utilizing latest engineering techniques, advancement in metal forming and minimization of weld joints results in lower life time ownership cost and brings "user delight" for years of operation
- SS Shipping legs and lifting hooks are permanently welded on the tanks and provide life time erosion free availability



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CRYOGAS EQUIPMENT
PRIVATE LIMITED

CIN No. : U29199GJ2009PTC056906

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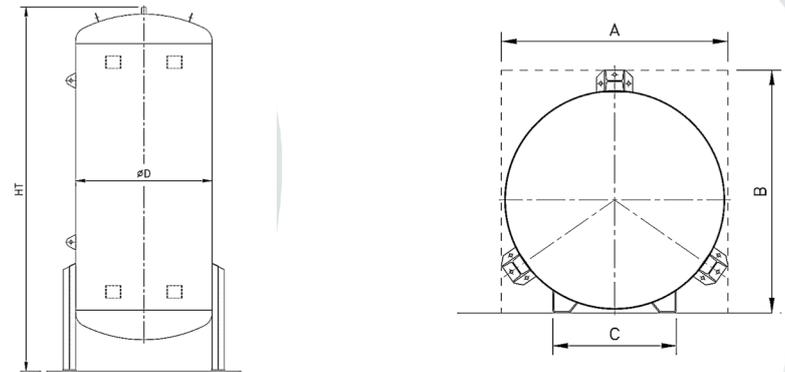
Cold Converter Models	VCT6	VCT10	VCT12	VCC17	VCT20	VCC30	VCC40	VCC50	VCC60	VCC77
Gross Capacity (Liters)	6094	9923	12476	16570	19771	32072	39587	50859	52131	77161
Net Capacity (Liters)	5789	9427	11852	15741	18782	30469	37608	48316	59025	73303
Daily Evaporation Rate O (%)	0.32	0.27	0.26	0.25	0.24	0.2	0.17	0.15	0.14	0.13
Empty Weight (Kg.)	4000	5150	5700	7370	7800	15700	18300	21480	25100	29300
Weight Full Nitrogen (Kg.) - LIN	8684	12777	15276	20105	22976	40349	48725	60568	72851	88602
Weight Full Oxygen (Kg.) - LOX	10606	15906	19223	25331	29230	50465	61210	76609	92447	112393
Weight Full Argon (Kg.) - LAR	12094	18329	22270	29376	34057	58295	70876	89026	107610	131777
Continuous Withdrawal Rate for 8 hours at 15 bar (Nm /Hr.)	400	400	400	400	400	600	600	600	600	600
Diameter (mm)	2140	2140	2140	2140	2140	3316	3316	3316	3316	3316
HT Height (mm)	4146	5721	6771	8794	9771	7641	8891	10766	12641	15141
A (mm)	2140	2140	2140	2242	2140	3320	3320	3320	3320	3320
B (mm)	2190	2190	2190	2399	2190	3605	3605	3605	3605	3605
C (mm)	1245	1245	1245	1245	1245	1902	1902	1902	1902	1902
Thermosiphon Models*	VCT6	VCT10	VCT12	VTH17	VCT20	VTH30	VTH40	VTH50	VTH60	VTH77

Nomenclature*

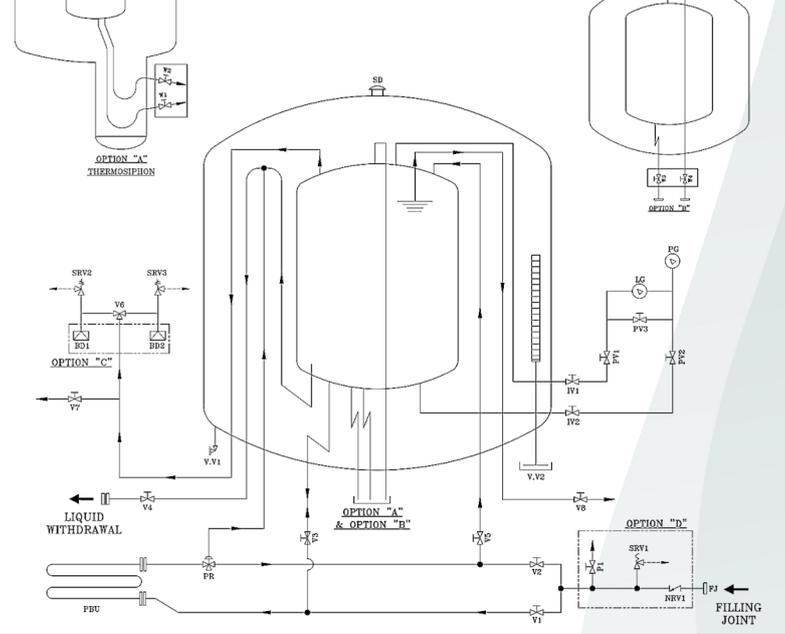
Note: (1) * Tanks with thermosiphon are app. 750 mm higher (2) Other higher size of Tanks can be manufactured as per customer requirement

V1	BOTTOM FILLING VALVE	
V2	TOP FILLING VALVE	
V3	PRESSURIZING VALVE	
V4	LIQUID WITHDRAWAL VALVE	
V5	STOP VALVE (PRESSURIZER)	
V6	THREE WAY FLOW DIVERTER VALVE	
V7	VENT VALVE	
V8	FULL TRYCOCK VALVE	
NRV1	INLET NOT RETURN VALVE	
PR	THREE WAY PRESSURE REGULATOR	
SRV2, SRV3	SAFETY RELIEF VALVE FOR INNER VESSEL	
SRV1	SAFETY RELIEF VALVE FOR PIPE LINE	
PV1	LEVEL GAUGE VALVE	THREE WAY MANIFOLD VALVE
PV2	LEVEL GAUGE VALVE	
PV3	PRESSURE BALANCE VALVE	
LG	LEVEL GAUGE	
PG	PRESSURE GAUGE	
V.V1	VACUUM PROBE VALVE	
V.V2	EVACUATION PORT	
SD	SAFETY DEVICE FOR OUTER VESSEL	
PBU	PRESSURE BUILD-UP UNIT	
IV1, IV2	ROOT ISOLATION VALVE	
OPTION "A" (THERMOSIPHON ARRANGEMENT)		
W1	LIQUID LINE TO PUMP	
W2	VAPOUR RETURN LINE FROM PUMP TO TANK	
OPTION "B"		
W3	ADDITIONAL LIQUID TAKE OFF LINE	
W4	ADDITIONAL GAS PHASE LINE	
OPTION "C"		
BD1, BD2	BURSTING DISC	
OPTION "D"		
NRV 1	INLET NON RETURN VALVE	
SRV 1	SAFETY RELIEF VALVE FOR PIPE LINE	
P1	PURGE VALVE	

Basic Dimensions



Flow Scheme



Cold Converter Storage Tanks | Thermosiphon Tanks | Transport Tankers | Framed ISO Containers | Microbulk Cryogenic Portable Containers Engineered Cryogenic Tanks | Atmospheric Vaporizers and Powered Cryogenic Vaporizers | Vacuum Insulated Pipelines | Complete Turnkey Cryogenic Solutions | LNG Regasification Stations | LCNG Stations | Mobile Cryogenic Vaporizers and Pumping Skids | Portable Helium and Nitrogen Liquefaction Plants | Semi and Fully Automatic Palletized Cylinder Filling Stations and Solutions.



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