

EVT SERIES

Vertical Cryogenic Storage Tanks for Atmospheric Gases

■ Inner vessel

Stainless steel for cryogenic temperatures with optimized design for lower weight.

■ Outer jacket

A system consisting of 3 legs with transport supports & lifting lugs for safe transport, easy lifting and low cost erection using a single crane, even in the case of 3 legs tank design.

■ Insulation

A multi-layer insulation (super insulation), new inner support system and high vacuum with absorbent to ensure long holding time and low evaporation rate.

■ Piping

Stainless steel piping for reliability and long life, ergonomically arranged workplace, flow diagram and gauges at eye level.

■ Valves

Stainless / bronze valves, fill cluster used as filling module.

■ Pressure control

An easy adjustable multifunctional regulator serves as pressure regulator, economizer and thermal relief valve. An aluminum flat fin PBU coil as standard.

■ Instrumentation

A high quality cryogenic pressure gauge and differential pressure content gauge are standard with optional switches, transmitter and / or telemetry unit.

■ Safety

Tanks are equipped with dual relief system with a variety of options, accommodating relief valves and / or rupture discs. Easily accessible relief valves with outlets directed away from the operating area.

■ Cleanliness

All tanks and their components are cleaned and certified for oxygen service.

■ Outer finish

High-gloss white paint with excellent corrosion resistance, patented engineered Siloxan coating with low VOC content.

■ Transport

Rugged internal supports for safe transportation by road, rail or container.

EVT tanks are designed in accordance with the requirements for safe, easy and economical operation. Many of the features have been incorporated in close collaboration with leading industrial gas companies.

EVT series tanks are vertical, stationary, pressure vessels with multi-layer insulation for long term storage of cryogenic liquefied gases under pressure such as nitrogen (LIN), oxygen (LOX), and argon (LAR), and/or carbon dioxide (LCO₂) or nitrous oxide (LN₂O) and their withdrawal in gaseous or liquid state.

EVT series are available in capacities of 3,000 and 6,000 litres with pressures of 19, 26 and 37 bar in accordance with and conforming to EC directive 97/23/EC (PED - pressure equipment directive).

Tank design is in accordance with EN 13458-2.



Innovation. Experience. Performance.

Chart Ferox, a.s., a Chart Industries Company

Chart Ferox, a.s. • Ústecká 30 • CZ-405 30 Děčín • Czech Republic • ph/ +420-412-507 343 • fx/ +420-412-507 297
Chart Ferox GmbH • Broshhauser Straße 20 • D-42697 Solingen • Germany • ph/ +49-(0)212-2 33 67-0 • fx/ +49-(0)212-2 33 67-10
Email: ferox-sales@chart-ld.com • Internet: <http://www.chart-ferox.com>
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EVT SERIES

Specifications

TYPE		EVT 3	EVT 6
Gross volume	liters	3400	6100
Net capacity (95 % filling) ¹⁾	liters	3200	5800
	LIN ¹⁾	kg	2600
	LOX ¹⁾	kg	3670
	LAR ¹⁾	kg	4520
	LCO ₂ ²⁾	kg	3550
	LN ₂ O ²⁾	kg	3400
Daily evaporation rate LOX ³⁾	%/d	0,31	0,23
Max. withdrawal rate LOX ⁴⁾⁵⁾	Nm ³ /h	430	430
Max. withdrawal rate LCO ₂ ⁶⁾	kg/h	105	105
Weight, empty	19 barg	kg	2270
	26 barg	kg	2490
	37 barg	kg	2740
Diameter (D)	mm	1600	
Overall width (A)	mm	1850	
Overall depth (B)	mm	1750	
Height (H)	mm	3850	5680

1) Filling 95% (equilibrium state at 0 barg).

2) Filling 95% (equilibrium state at 10 barg) If the tank specification states a different filling, the net volume changes proportionally.

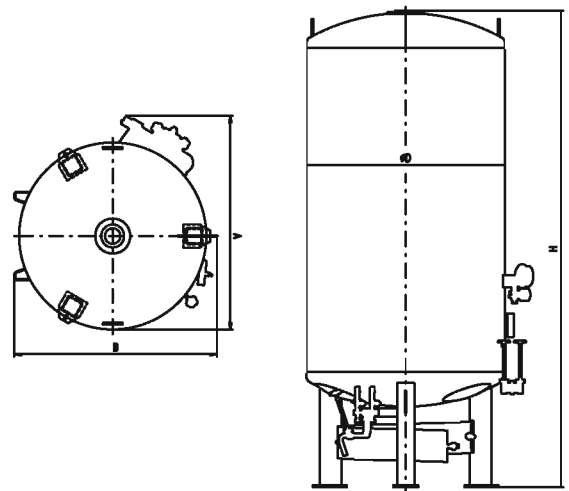
3) Nominal Evaporation Rate per 24 hours according EN12213.

4) Stated rates are for short term withdrawal (up to 3 hrs) at 10 bar.

5) For N2 rate multiply by 0.88, for Ar rate multiply by 1.01.

6) Stated rates are at 15 bar and ambient temperature 10°C.

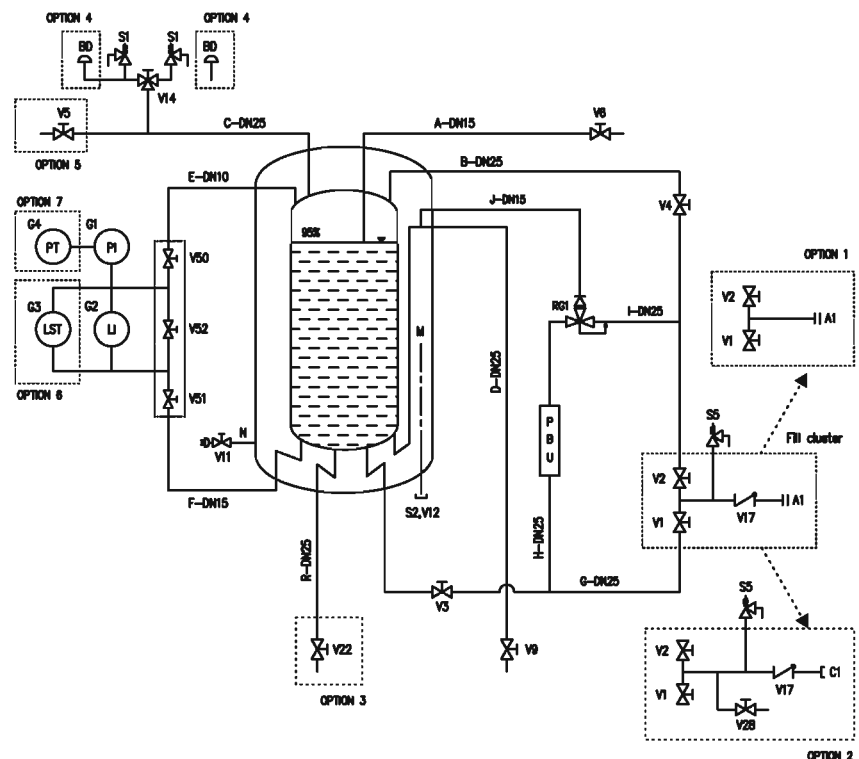
BASIC DIMENSIONS



Nomenclature

- A1** Fill connection, part of fill cluster
- BD*** Bursting discs
- C1*** Fill connection, part of fill cluster
- LI** Level indicator
- LST*** Differential pressure transmitter
- PBU** Pressure building vaporizer
- PI** Pressure indicator
- PT*** Pressure transmitter
- RG1** Pressure control valve / Economizer
- S1** Safety valves, inner vessel
- S2** Vacuum safety valve
- S5** Thermal relief valve, part of fill cluster
- V1** Bottom fill valve, part of fill cluster
- V2** Top fill valve, part of fill cluster
- V3** Isolation valve, bottom filling
- V4** Isolation valve, top filling
- V5*** Valve, vapor vent, gas outlet
- V6** Valve, trycock
- V9** Valve, external vaporizer
- V11** Vacuum gauge
- V12** Vacuum pump down
- V17** Check valve, part of fill cluster
- V22*** Valve, liquid outlet
- V28*** Fill line drain, part of fill cluster

* options



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