



VS-CO₂

Bulk Stations



Our **VS-CO₂ Series** of Bulk Carbon Dioxide Storage Tanks continues our pioneering of user-friendly engineered products. This design series offers strength and durability in an all-welded outer container, while maintaining lower life-cycle costs. Utilizing our composite insulation system along with superior vacuum technology, we are able to offer:

- ◆ An ultra-low heat leak, eliminating the need for a costly refrigeration system in most applications.
- ◆ No costly down time to refurbish water-soaked or deteriorated foam insulation.

Every **VS-CO₂** pressure vessel is manufactured, tested and stamped in accordance with the latest edition of the ASME Boiler and Pressure Vessel Code, Section VIII, Division I, using SA612 normalized steel. Our **VS-CO₂ Bulk Stations** are equipped with an internal cleaning system operated externally, eliminating the need for costly manways.

Simplified Plumbing Layout

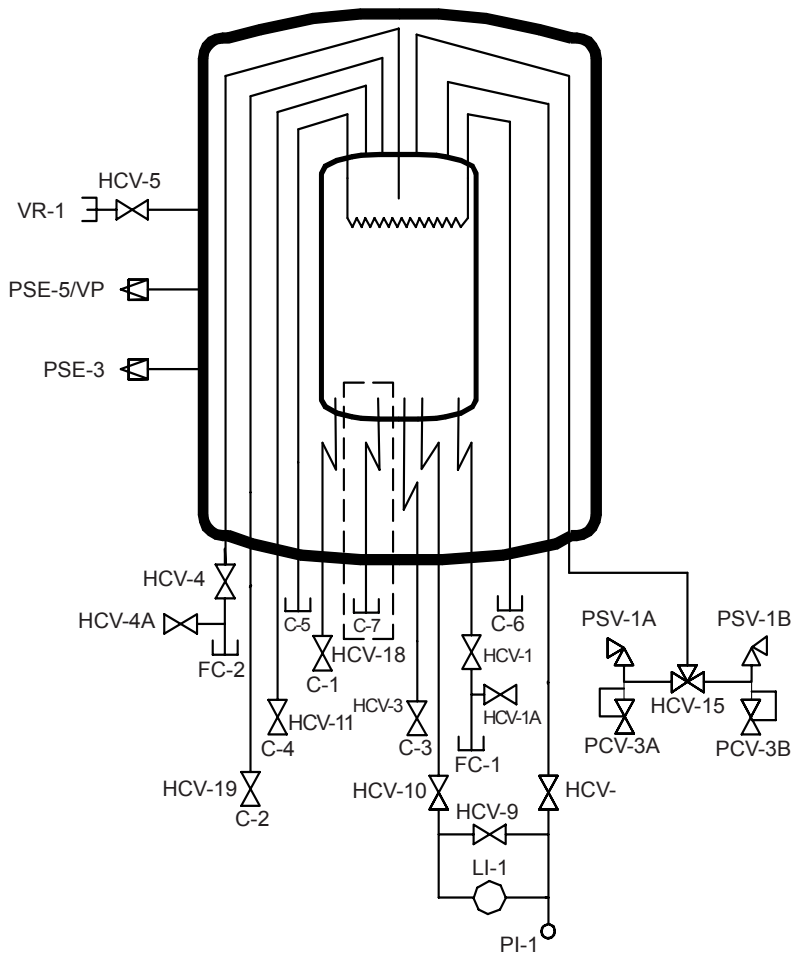
- ◆ Stainless-steel piping for greater strength and durability
- ◆ Stainless-steel ball valves standard on all fill and process lines
- ◆ Minimum number of piping joints, reducing potential piping leaks and maintenance costs
- ◆ CGA fill and return fittings with drain valves standard on all models
- ◆ Optimum piping design results in flexible equipment connection
- ◆ Dual regulator system standard, eliminating any safety concerns
- ◆ Pressure Building and Vaporizer options available, inquire with Chart for more details
- ◆ Interchangeable gauge systems with a choice of analog or digital telemetry capable systems are available with flexible stainless-steel interconnecting lines
- ◆ 6-Ton equipped with capped refrigerant lines and internal coil (*available as option on all other models*)

VS-CO₂

VERTICAL

Model	Gross Capacity		Net Capacity		MAWP*		Height		Diameter		Weight**	
	Ton	(Tonne)	Ton	(Tonne)	PSIG	(bar)	in	(mm)	in	(mm)	lbs	(kg)
6 Ton	6.8	(6.2)	6.4	(5.8)	350	(24.1)	188	(4,775)	68	(1,728)	9,000	(4,080)
14 Ton	13.2	(12.0)	12.6	(11.4)	350	(24.1)	228	(5,791)	86	(2,184)	17,400	(7,900)
30 Ton	31.1	(28.2)	29.6	(26.9)	350	(24.1)	287	(7,290)	114	(2,900)	39,600	(17,970)
50 Ton	48.1	(43.6)	45.8	(41.5)	350	(24.1)	406	(10,312)	114	(2,900)	56,900	(25,810)

* MAWP – Maximum Allowable Working Pressure ** Tare Weight



Nomenclature

C-1	Connection, Auxiliary Liquid
C-2	Connection, Auxiliary Vapor
C-3	Connection, PB Liquid
C-4	Connection, PB Vapor
FC-1	Connection, Fill
FC-2	Connection, Vapor Return/Full Trycock
HCV-1	Valve, Bottom Fill
HCV-1A	Valve, Drain
HCV-3	Valve, PB Liquid
HCV-4	Valve, Vapor Return/Full Trycock
HCV-4A	Valve, Drain
HCV-5	Valve, Vacuum Gauge Tube
HCV-8	Valve, LI-1 Vapor Phase
HCV-9	Valve, LI-1 Equalization
HCV-10	Valve, LI-1 Liquid Phase
HCV-11	Valve, PB Vapor
HCV-15	Valve, Safety Relief Selector
HCV-18	Valve, Auxiliary Liquid
HCV-19	Valve, Auxiliary Vapor
LI-1	Level Indicator, Inner Vessel
PI-1	Pressure Indicator, Inner Vessel
PCV-3A	Pressure Control Valve, Econ Vent
PCV-3B	Pressure Control Valve, Econ Vent
PSE-3	Pressure Safety Element, Outer Vessel
PSE-5/VP	Pressure Safety Element, Otr Ves., Vac Port
PSV-1A	Pressure Safety Valve, Inner Vessel
PSV-1B	Pressure Safety Valve, Inner Vessel
VR-1	Vacuum Readout, Outer Vessel

Refrigeration Option (Standard on 6 Ton)

C-5	Connection, Auxiliary Refrigeration
C-6	Connection, Auxiliary Refrigeration

Dashed Line represents Additional Line (Standard on 30/50 Ton Only)

C-7	Connection, Secondary Auxiliary Liquid
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