HSCO2 SN20 HORIZONTAL BULK STORAGE SYSTEMS

Our HSCO₂ & N₂O Series of Bulk Carbon Dioxide and Nitrous Oxide Storage Tanks are engineered for the efficient storage supply of carbon dioxide and nitrous oxide. For maximum lifetime thermal efficiency, the HSCO₂ and N₂O systems are manufactured with an all-welded outer container to contain our proprietary Composite Super InsulationTM system and superior vacuum technology.



PRODUCT HIGHLIGHTS

Vacuum-Jacketed Composite vs. Foam Insulation

- Lowest lifecycle costs for bulk CO₂ & N₂O storage
- Superior functional performance
- High-strength, dent resistant outer jacket eliminates deterioration of insulation, costly repairs, down-time
- Simplified plumbing reduces potential for piping leaks Eliminate product loss due to venting
- · Hold time is 8 times longer than foam
- Refrigeration system not required for maintaining heat leak
- · No monthly maintenance or electrical charges
- No manway required for condenser coil maintenance
- Two-year payback vs. foam tank
- Pressure builder and vaporizer systems available see applications brochure P/N 21111520 for details
- · Backed by a five-year vacuum warranty
- Optional internal vapor condensing coil available see applications brochure P/N 21111520 for details

Horizontal benefits

- · Low profile to meet your height restrictions
- Eliminates seismic concerns
- Replace existing foam footprint

Thermal Performance - HSCO₂ Vacuum Jacketed vs. Foam CO₂ Tanks







Innovation. Experience. Performance.

Model	Gross Cap. Ton Tonne	O ₂ Net Cap. Ton Tonne	Gross Cap. Ton Tonne	N ₂ O	MAWP* psig bar	Length in mm	Width in mm	Height in mm	Weight** lbs Kg	NER %/day in CO ₂ /N ₂ O
6 Ton	6.9 6.3	6.7 6.0	8.5 7.7	8.0 7.3	350 24.1	188 4,775	68 1,728	80 2,032	8,500 3,85	6 .24
14 Ton	13.2 12.0	12.6 11.4	12.9 11.7	12.3 11.2	350 24.1	233 5,913	86 2,184	95 2,413	17,400 7,89	90.12
30 Ton	32.9 29.8	31.2 28.3	32.1 29.2	30.5 27.7	350 24.1	280 7,112	114 2,900	127 3,226	31,900 14,4	470 .08
50 Ton	51.1 46.3	48.5 44.0	49.9 45.3	47.4 43.0	350 24.1	396 10,058	3 114 2,900	127 3,226	43,300 19,	641 .06

* MAWP - Maximum Allowable Working Pressure. ** Weights are for ASME design. (NER) = Normal Evaporation Rate



Nomen	clature
C-1 C-2 C-3 C-4 FC-1 FC-2 HCV-1 HCV-1A HCV-3 HCV-4 HCV-4 HCV-5 HCV-5 HCV-9 HCV-10 HCV-10 HCV-10 HCV-11 HCV-15 HCV-18 HCV-19 LI-1 PI-1 PCV-3A PCV-3B PSE-3 PSE-5/VP PSV-1A PSV-1B VR-1	Connection, Auxiliary Liquid Connection, Auxiliary Vapor Connection, PB Liquid Connection, PB Vapor Connection, Fill Connection, Vapor Return/Full Trycock Valve, Bottom Fill Valve, Drain Valve, PB Liquid Valve, Vapor Return/Full Trycock Valve, Vapor Return/Full Trycock Valve, Drain Valve, Vapor Return/Full Trycock Valve, Uapor Return/Full Trycock Valve, Uapor Return/Full Trycock Valve, Uapor Return/Full Trycock Valve, Uapor Phase Valve, LI-1 Equalization Valve, LI-1 Equalization Valve, LI-1 Equalization Valve, PB Vapor Valve, Safety Relief Selector Valve, Auxiliary Liquid Valve, Auxiliary Vapor Level Indicator, Inner Vessel Pressure Control Valve, Econ Vent Pressure Control Valve, Econ Vent Pressure Safety Element, Outer Vessel Pressure Safety Element, Outer Vessel Pressure Safety Valve, Inner Vessel Pressure Safety Onter Vessel Pressure Safety Onter Vessel
C-5 C-6	Connection, Auxiliary Refrigeration Connection, Auxiliary Refrigeration
Da C-7	shed Line represents Additional Line (Standard on 30/50 Ton Only) Connection, Secondary Auxiliary Liquid

Auxiliary refrigeration valves on HCV-1A and HCV-4A not included in C-5 and C-6 optional N₂O service.

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