

# PERMA-CYL® 3000 VHP

HIGH PRESSURE – HIGH CAPACITY

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The innovative Perma-Cyl® 3000VHP is the latest addition to the Perma-Cyl product line of fast fill at-site MicroBulk storage vessels. Designed for configuration to any gas application, the Perma-Cyl 3000VHP is flexible to supply service from low pressure liquid nitrogen to high pressure, high flow gas supply. The relief valve setting is 500 psig (34.5 barg), and with our industry-exclusive *configure to order* plumbing you can build your own Perma-Cyl 3000VHP to meet your distribution practice and your customer's needs economically.

The Perma-Cyl 3000VHP comes with all the standard Perma-Cyl features. Additionally, this model comes standard with Chart's exclusive HP<sup>2</sup> Pressure Building/Product Vaporizer Technology. This package optimizes the platform for high pressure/high flow applications.

When filled with the Orca® delivery system, the Perma-Cyl 3000VHP is designed for a safe automatic shut-off with no filling losses under normal operating conditions. The Perma-Cyl series is designed to store liquefied gas contents for long periods of time without venting – thus, limiting product losses during periods with little or no use.

## PRODUCT HIGHLIGHTS

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- Fast accurate fills
  - Automatic fill shut-off works with Orca delivery system
  - Top fill circuit to optimize fill time
- Cyl-Tel® contents gauge
  - Digital and accurate
  - Telemetry ready for Onsite® and Data Online™
  - Built-in user-selectable scales
- Easy to use instruments and controls
  - Located at user height
  - Single-adjustment metered combo regulator
  - Isolation valves for regulator and level gauge
- Long-life low-maintenance
  - Stainless steel piping and outer vessel
  - Heavy-duty galvanized pallet base
- Any application - Any time
  - Choice of configurations to meet customer needs
  - Easy low-cost installation – outdoors or indoors (local codes permitting)
  - Service: N<sub>2</sub>/Ar/O<sub>2</sub>/CO<sub>2</sub>
  - VIP/MVIP/Python option for LN<sub>2</sub>
  - Optional external pressure builder/vaporizer



Pat. No. 6,799,429



Innovation. Experience. Performance.™

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<b>CAPACITIES</b>		
Gross Volume	770 gal	2911 liters
Net Volume	715 gal	2707 liters
Gas Storage Capacity (@ 1 Atm & 68° F / 20° C)*		
Oxygen	82,239 scf	2161 Nm <sup>3</sup>
Nitrogen	66,592 scf	1750 Nm <sup>3</sup>
Argon	80,425 scf	2115 Nm <sup>3</sup>
Carbon Dioxide	52,954 scf	1390 Nm <sup>3</sup>
<b>GENERAL SPECIFICATIONS</b>		
Relief Valve Setting / MAWP	500 psi	34.5 bar
Overall Height w/ Piping & Lab Base	122.5 in	3112 mm
Width w/ Lab Base	61 in	1549 mm
Tank Diameter	59 in	1499 mm
Tare Weight	4250 lbs	1928 kg
<b>PERFORMANCE</b>		
Normal Evaporation Rate (% per day)**		
Nitrogen	1%	1%
Oxygen & Argon	0.62%	0.62%
Gas Supply Rate	2000 scfh	52.4 Nm <sup>3</sup> H
High-Flow Option (side mount)	3500 scfh	92 Nm <sup>3</sup> H
<b>CONSTRUCTION</b>		
Design & Manufacturing Code	ASME Sec. VIII Div. 1	
Outer Vessel	Type 304 SS	

**Footnotes:** Specifications subject to change without prior notice.

Patents: 5,787,942 • 5,954,101 • 6,799,429.

\*Values are based on net capacity at 0 psig (0 barg). See page 15 of Chart's MicroBulk Systems Product Catalog (P/N 11926802) for conversion densities.

\*\*Values are based on gross volume.

