

PERMA-CYL® 2000 VHP

HIGH PRESSURE - HIGH FLOW

The innovative Perma-Cyl® 2000VHP is the latest addition to the Perma-Cyl product line of fast fill at-site MicroBulk vessels. Designed for high-pressure high-flow applications, such as lasers and HVOF (high velocity oxy-fuel), the Perma-Cyl 2000VHP has a relief valve setting of 500 psig and a gas supply rate of up to 3500 scfh (92 Nm³H).

The Perma-Cyl 2000VHP comes with all the standard Perma-Cyl features plus Chart's powerful new multi-function vaporizer technology. The revolutionary vaporizer design provides high performance pressure building and gas supply at high operating pressures.

When filled by the Orca® delivery tank, the Perma-Cyl 2000VHP is designed to have short fill times with no gas losses under prescribed conditions. The Perma-Cyl can hold its liquefied gas contents for long periods without venting, thus limiting product losses during periods with little or no gas use.

PRODUCT HIGHLIGHTS

- Up to 3,500 scfh (92 Nm³H) at 450 psi (31 bar)
 - Powerful high-flow external multi-function vaporizer
 - Fast response pressure builder
- The better alternative to full-for-empty cylinders
 - Replaces up to 175 HP gas cylinders
 - Extended holding time
 - Choice of configurations to meet customer needs
 - Easy low-cost installation – outdoors or indoors (local codes permitting)
- 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
 - 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



Patents Pending



Innovation. Experience. Performance.™

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GENERAL SPECIFICATIONS		
Relief Valve Setting / MAWP	500 psi	34.45 bar
Overall Height	117 in	2970 mm
Width with Piping	62 in	1575 mm
Length with Piping	59 in	1500 mm
Tank Diameter	48 in	1219 mm
Tare Weight	3860 lbs	1751 kg
CAPABILITIES		
Gross Volume	539.5 gal	2042 liters
Net Volume	513.9 gal	1945 liters
Gaseous Volume (@ 1 Atm & 70° F / 0° C)*		
Oxygen	59,089 scf	1553 Nm ³
Nitrogen	47,847 scf	1257 Nm ³
Argon	57,786 scf	1519 Nm ³
PERFORMANCE		
Normal Evaporation Rate (% per day)**		
Nitrogen	1%	1%
Oxygen & Argon	0.62%	0.62%
Gas Supply Rate	2000 scfh	52.4 Nm ³ H
High-Flow Option	3500 scfh	92 Nm ³ H
CONSTRUCTION		
Design & Manufacturing Code	ASME Sec. VIII Div. 1	
Outer Vessel	Type 304 SS	
Multi-Function Vaporizer (Standard)	Ambient Side-Mounted Aluminum	

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 bar). See page 15 of Chart's MicroBulk Systems Product Catalog (P/N 11926802) for conversion densities.

**Values are based on gross volume.

