

# PERMA-CYL® CO<sub>2</sub> HP

## FAST FILL MICROBULK STORAGE FOR CO<sub>2</sub> SERVICE

---

The Perma-Cyl® 2000 and 3000 CO<sub>2</sub> HP MicroBulk Storage Systems are specifically designed for CO<sub>2</sub> service. One notable performance improvement is the fast fill feature – at least three times the fill rate over our standard Perma-Cyl Series from a typical beverage delivery truck. The upsizing and redesign of the top fill eductor circuit reduces the overall fill time, and also reduces the amount of vent gas during delivery for a more efficient fill. Other new design features include larger internal pressure builder and vaporizer coils, allowing for faster pressure recovery and increased gas flow rates. Dedicated pressure builder and economizer regulators also contribute to this improved performance.

The Perma-Cyl CO<sub>2</sub> HP tank comes with many of the standard features found on the Perma-Cyl Series for easy installation and fast start up. The Perma-Cyl Series is well known for holding its liquefied gas contents for long periods of time without venting, thus limiting product loss during periods of little or no gas use.

### PRODUCT HIGHLIGHTS

---

#### The better alternative to full-for-empty cylinders

- Replaces HP cylinders
- Extended hold time over liquid cylinders
- Easy low-cost installation – indoors or outdoors (local codes permitting)
- Safety devices pipe-away required for indoor installation

#### Fast, efficient fills

- Efficient fill circuit reduces fill times and vent losses
- Fill rates up to 170 lbs/min\*

#### High-performance vaporizer

- Up to 500 scfh at 300 psig\*\*
- Available in 125 psig and 300 psig operating pressures
- Dedicated Pressure Builder (½") and economizer regulators

#### Cyl-Tel® Liquid Level Gauge

- Digital and accurate
- Built-in user selectable scales
- Telemetry ready

#### Ergonomic instruments and controls

- Located at user height
- Isolation valves for regulators and level gauge

#### Long life, low maintenance

- Stainless Steel bottle and welded piping
- Heavy-duty galvanized pallet base



Perma-Cyl® 2000 CO<sub>2</sub> HP

\* Pressure transfer performance from 33% full at 125 psig to 90% full in 12 minutes with delivery vessel at 295 psig starting pressure without Perma-Cyl storage tank venting.

\*\* Based on twelve hours per day of continuous duty at 68°F and 50% RH ambient conditions with internal vaporizer.



# PERMA-CYL® CO<sub>2</sub> HP

FAST FILL MICROBULK STORAGE FOR CO<sub>2</sub> SERVICE

GENERAL SPECIFICATIONS	2000 CO <sub>2</sub> HP		3000 CO <sub>2</sub> HP	
Relief Valve Setting / MAWP	350 psig	24.1 barg	350 psig	24.1 barg
Overall Height	116 in	2946 mm	122 in	3099 mm
Width with Pallet Base	53 in	1346 mm	60.5 in	1537 mm
Length with Pallet Base	67 in	1702 mm	75.5 in	1918 mm
Tank Diameter	48 in	1219 mm	58 in	1473 mm
Tare Weight*	2950 lbs	1338 kg	3300 lbs	1497 kg
<b>CAPACITIES</b>				
Gross Volume	539.5 gal	2042 liters	769 gal	2911 liters
Net Volume	513.9 gal	1945 liters	715 gal	2707 liters
Gaseous Volume**	38,048 scf	1000 Nm <sup>3</sup>	52,954 scf	1390 Nm <sup>3</sup>
Weight Volume**	4353 lbs	1973 kg	6057 lbs	2747 kg
<b>PERFORMANCE</b>				
Normal Evaporation Rate (% per day)***	.3%			
Gas Supply Rate @ 300 psig	500 scfh	14.2 Nm <sup>3</sup> H	500 scfh	14.2 Nm <sup>3</sup> H
	57 lbs/hr	26 kg/hr	57 lbs/hr	26 kg/hr
Gas Supply Rate @ 300 psig****	2600 scfh	73.8 Nm <sup>3</sup> H	2600 scfh	73.8 Nm <sup>3</sup> H
	300 lbs/hr	136 kg/hr	300 lbs/hr	136 kg/hr
<b>CONSTRUCTION</b>				
Design & Manufacturing Code	ASME Sec. VIII Div. 1			
Outer Vessel	Type 304 SS			
Pallet Base	Galvanized Carbon Steel			

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

\*Weights include lab base.

\*\*Values are based on net capacity at 300 psig (20.7 barg).

\*\*\*Values are based on gross volume.

\*\*\*\*External vaporizer required.

