

# HP<sup>2</sup>™

## HIGH PRESSURE – HIGH PERFORMANCE BULK GAS DELIVERY SYSTEM

An integrated state-of-the-art system, including an HP<sup>2</sup>™ storage vessel, a multi-function vaporizer and advanced control technology delivering high-pressure high-performance gas flow.

### CUT OPERATING COSTS

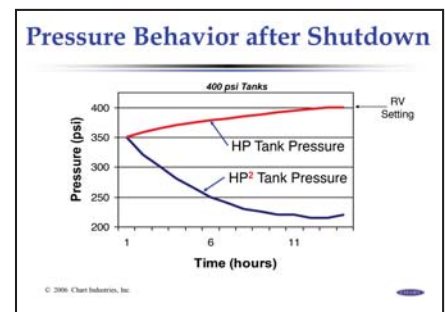
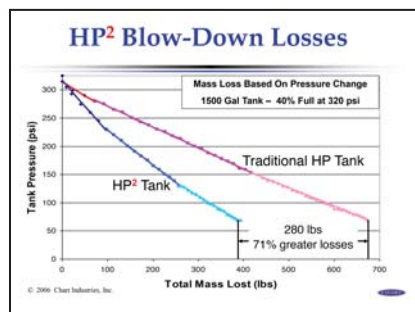
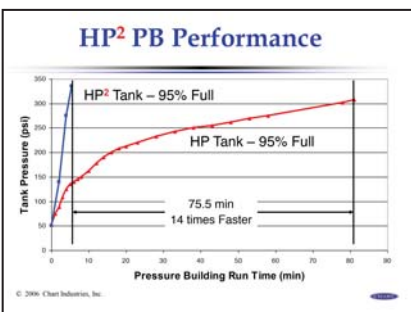
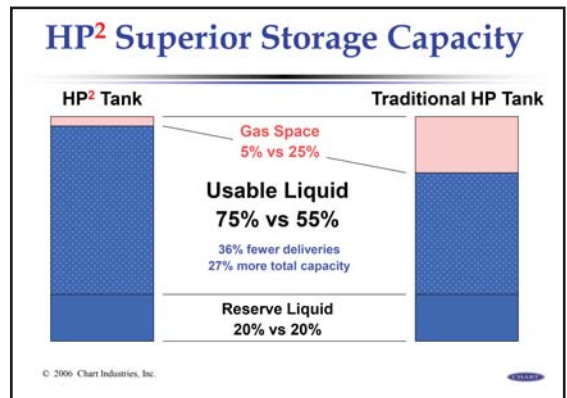
- Reduces deliveries up to 36%
- Reduces delivery time up to 33%
- Increases actual storage capacity by 27% or reduces needed tank size
- Reduces service calls and maintenance
- Telemetry ready
- Easy to configure and install

### IMPROVE CUSTOMER SATISFACTION

- Reduces customer downtime by up to 86%...or to zero with optional fill assist unit (Perma-Cyl® VHP)
- Cuts blow-down and venting losses and increases holding time
- Builds operating pressure in minutes
- Actuated ball valves provide precision pressure control and eliminate regulator pressure creep
- Reduces space required to provide the same gas flow rates
- Easy to adjust pressure settings and contents alarms – truly user-friendly

### ADD PERFORMANCE

- Pressure building recovery in 10 minutes or less at 95% full
- Pressure easily adjustable to within 50 psig / 3.4 barg of tank MAWP
- Flow rates up to 12,500 scfh / 328 Nm<sup>3</sup>H
- Available in sizes from 900 gallons / 3,406 liters and larger
- Available in operating pressure of 400 psig / 27.6 barg and 500 psig / 34.5 barg





# HIGH PRESSURE – HIGH PERFORMANCE BULK GAS DELIVERY SYSTEM

GENERAL	
Pressure Building / Recovery Time	10 min or less at 95% full – 150 psig / 10.3 barg to 450 psig / 31 barg
Net Storage Capacity of Tank *	95% of gross tank capacity *
Pressure Control (Using Pressure Switch)	Adjustable to within 50 psig of MAWP – 3 alerts
Liquid Level Alarms (Using Tank-Tel® Gauge)	Adjustable in 5% increments – 3 alerts
Options	Fill Assist Unit, HP <sup>2</sup> Retrofit Kits, and Dual Vaporizers

HP <sup>2</sup> ™ TANK ( See VS High Pressure Bulk Station literature )	Net Capacity*( gal. / liters )	MAWP ( psig / barg )
VS-900SC	850 / 3,218	400 / 27.6 or 500 / 34.5
VS-1500SC	1,580 / 5,981	400 / 27.6 or 500 / 34.5
VS-3000SC	3,030 / 11,470	400 / 27.6 or 500 / 34.5
VS-6000SC	5,770 / 21,842	400 / 27.6 or 500 / 34.5
Larger High-Pressure Tanks	Contact Chart	Contact Chart

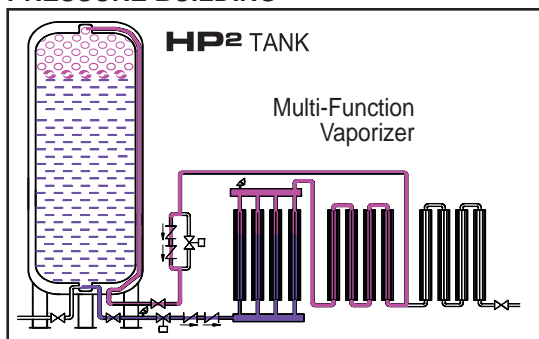
CONTROL / INSTRUMENTATION **	
Power Requirement	110 VAC x 5 Amp
Pressure and Contents Measurement	Tank-Tel – telemetry ready (see Tank-Tel literature)

PIPING & CONTROL MODULE **	
Gas Supply Requirement	Clean Dry Nitrogen or Air (Dew Point -40F) at 100 psig / 6.9 barg
Ball Valves	2 x Pneumatic Operated
Piping	3/4" Nominal Copper Tubing
Inlet and Outlet Connections	7/8" ODT Compression
Dimensions L x W x H (in. / mm)	44 x 26 x 31 / 1,120 x 660 x 790

MULTI-FUNCTION VAPORIZER ( Ambient ) **	3.5 K Model	7.5 K Model	12.5 K Model
Rated Flow Capacity (scfh / Nm <sup>3</sup> H) ***	3,500 / 92	7,500 / 197	12,500 / 328
Design Pressure (psig / barg)	600 / 41	600 / 41	600 / 41
Overall Height (in. / mm)	132 / 3,353	132 / 3,353	156 / 3,962
Length / Width (in. / mm)	35 x 27 / 889 x 686	35 x 50 / 889 x 1,270	47 x 50 / 1,194 x 1,270
Rattler Valve for Snow and Ice Removal	Optional	Included	Included

**Footnotes:** Specifications are subject to change without prior notification. \*HP<sup>2</sup> tanks can be filled to 95% of gross capacity. For traditional high-pressure bulk tanks the recommended fill level is only 75% of gross capacity. \*\*Components used in the HP<sup>2</sup> Retrofit Kit for converting existing high-pressure tanks to HP<sup>2</sup> technology. \*\*\*Flow rate based on nitrogen under standardized conditions with minimum 1" liquid feed and gas return lines.

## PRESSURE BUILDING



## GAS SUPPLY

