

PURA PERMA-CYL®

ALL STAINLESS STEEL FOR ICP-MS APPLICATIONS

This convenient fully-automated gas supply system provides high purity gas, increased productivity, and lower operating costs. Chart's MicroBulk system gives you all the benefits of bulk gas in a compact package set up to your specifications. The MicroBulk system consists of the Perma-Cyl® tank with the Cyl-Tel® digital level gauge. The thermally efficient Perma-Cyl system is permanently installed, providing a continuous supply of argon to your ICP.



Purity

Provides consistent high-purity gas with on-site filling direct from gas supplier

Convenience

Single fill on-site Perma-Cyl unit eliminates cylinder exchanges

Savings

Exact gas billing based on metered gas delivery

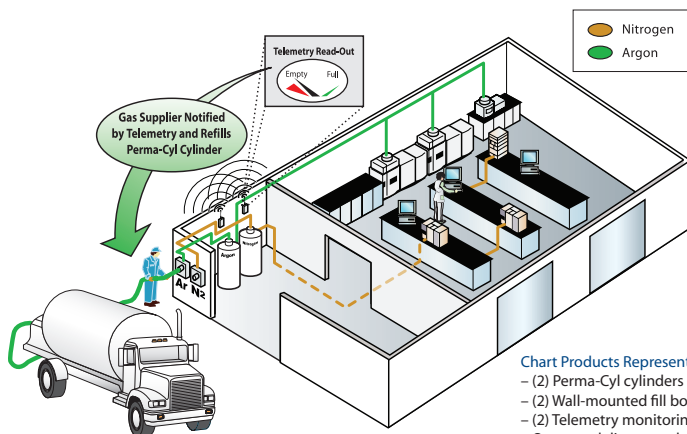


Chart Products Represented in the Illustration
– (2) Perma-Cyl cylinders on-site installation
– (2) Wall-mounted fill boxes for gas delivery
– (2) Telemetry monitoring gas levels
– Orca gas delivery truck filling tanks

LAB CONCEPT CONFIGURATION

Chart's innovative MicroBulk gas supply system:

- Conforms discretely to any laboratory configuration
- Eliminates cylinder exchanges
- Restores space occupied by extra cylinders
- Assures uninterrupted test cycles
- Monitored direct supply chain with telemetry-compatible digital contents gauge



Innovation. Experience. Performance.®

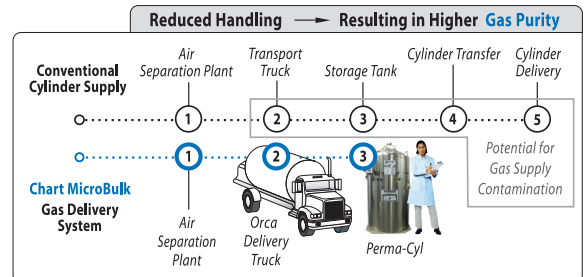
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Purity

The argon product is delivered from the Air Separation Plant directly to the on-site Perma-Cyl® unit via the Orca truck, providing the most pure product available. All stainless steel tank, plumbing and internal vaporizer lines limit the potential for product contamination.

- No lost gas or contamination from cylinder exchanges
- Maintain a constant inlet pressure
- Achieve a higher purity gas supply



Convenience

The Cyl-Tel® gauge is programmable to suit any desired user readout providing friendly and accurate level monitoring with telemetry ready capability. The Cyl-Tel gauge allows the gas supplier to monitor the liquid level in your Perma-Cyl system and refill it automatically.

- No cylinder handling, exchanges or inventory
- Eliminate floor damage and free up lab space
- Increase equipment duty cycle with Cyl-Tel gas supply
- Supply multiple pieces of equipment from one gas source

Savings

The Perma-Cyl cylinder is smaller than a bulk tank, making it affordable and flexible to accommodate most installations. The Perma-Cyl system can be located inside in conjunction with Chart's wall box or outside the lab to supply a continuous flow of argon gas to the ICP.

- No lost gas from idle cylinder venting
- Pay for gas used instead of lost residual
- Eliminate equipment down time and recalibration
- Obtain gas savings of up to 40% (based on a recent case study)
- Perma-Cyl unit sizes available in 230, 450, 1000 and 2000 HP liters to fit most lab needs

Make the Comparison of On-site Installations



Before



After



Stainless Steel Plumbing Meets Required Purity Specs for ICP-MS

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