



# Praxair's Microbulk™ Delivery For ICP — The Lab Alternative To Cylinders And Dewars

Permanently installed at your site, Praxair's *Microbulk*™ delivery system replaces high-pressure cylinder and dewar handling and changeouts with a low-pressure storage tank of argon 4.8 ICP grade. The *Microbulk* system eliminates supply interruptions, with consistent gas quality that ensures reliable analytical results.

Praxair offers *Microbulk* tanks of up to 1,500 liters, depending on the number of ICP instruments in operation.

Explore all the benefits Praxair offers. Call **1-800-PRAXAIR** today and see for yourself how we can help make a difference in your operation.

## Bulk System In Miniature

At the heart of our *Microbulk* delivery system is a permanently installed stainless steel storage tank that comes in a variety of sizes to fit your specific needs. Each tank is optimized for on-site filling that takes only two to six minutes and offers longer hold times than standard containers.

To avoid supply interruptions, your tank is connected to a locked, tamper-resistant fill box, which is wall-mounted outside so Praxair can deliver the gas you need around the clock. Praxair also monitors your tank volume through a telemetry unit linked directly to our customer service center.

The result is a system that delivers:

- Convenience
- High product quality
- Increased productivity and cost-savings
- Improved safety

## Convenience

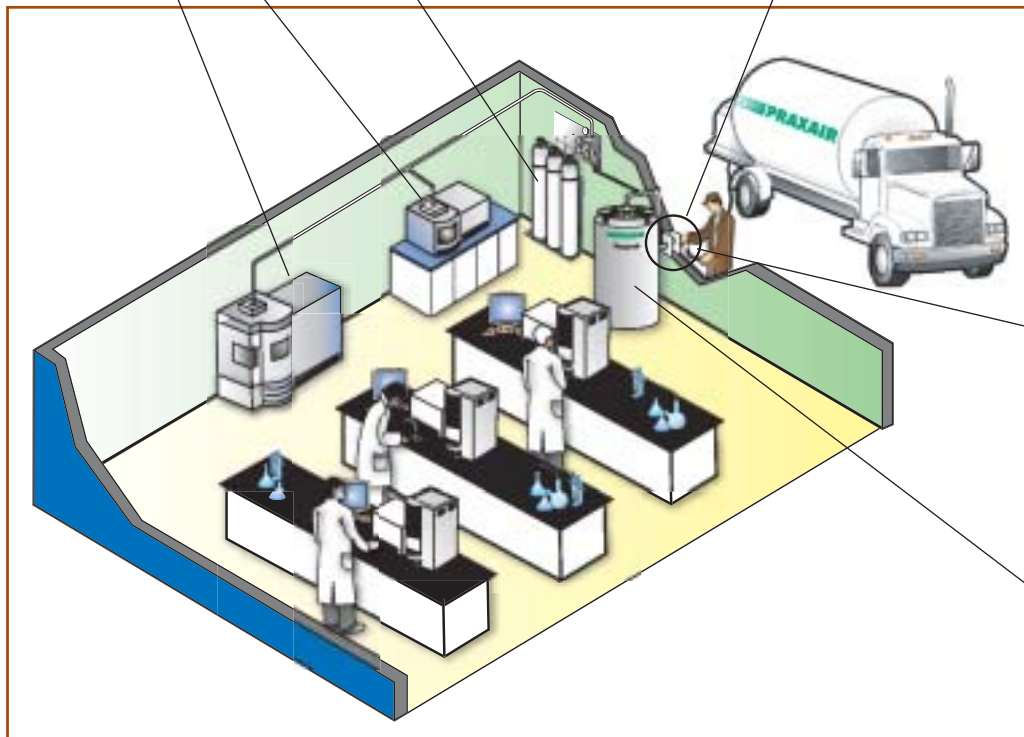
- Uninterrupted supply
- Praxair supply management — telemetry
- No cylinder or dewar handling and changeouts
- No cylinder or dewar monitoring

*Managing gas quality improves performance of ICP-OES and ICP-MS instruments.*

*High-pressure reserve system ensures uninterrupted argon supply.*



*A locked, tamper-resistant fill box wall-mounted outside lets Praxair deliver the gas you need around the clock.*



*Praxair's unique telemetry system links directly to Praxair's monitoring center, preventing on-site "run out."*



*Dedicated high-purity stainless steel tank provides consistent argon 4.8 ICP grade.*

MODEL	450MP	450HP	450VHP	1000MP	1000HP	1000VHP	1500HP	1500VHP
Gross Capacity (liters)	450	450	450	1,056	1,056	1,056	1,550	1,550
Net Capacity (liters)	420	420	420	950	950	950	1,455	1,455
MAWP (psig)	250	350	500	250	350	500	350	500
Max Gas Delivery Rate (scf/h)	575	575	575	960	960	960	1,350	1,350
Diameter (in)	30	30	30	42	42	42	48	48
Height (in)	68	68	68	77	77	77	91	91
Tare Weight (lb)	605	688	812	1,550	1,750	2,080	2,692	3,200
Design Specifications	ASME	ASME	ASME	ASME	ASME	ASME	ASME	ASME
Materials of Construction	Inner and Outer Shell 304 Stainless Steel							

### High Product Quality

- Argon 4.8 ICP grade
- Consistent high-purity argon
- High-integrity delivery system
- Stable pressure and flow

### Improved Safety

- Eliminates cylinder or dewar handling
- High-pressure cylinders replaced by low-pressure tank
- Oxygen deficiency monitor available

### Increased Productivity And Cost-Savings

- Cost-effective
- Eliminates stabilization time from cylinder or dewar changeouts
- No residual gas returned to supplier
- More efficient accounting and ordering
- No cylinder or dewar inventory management
- Better use of space
- Lower tank NER

### Argon 4.8 ICP Grade

Purity	<b>99.998%</b>
Total Hydrocarbons	<b>1 ppm</b>
Carbon Dioxide	<b>1 ppm</b>
Moisture	<b>2 ppm</b>
Oxygen	<b>3 ppm</b>
Krypton	<b>Case-by-case basis</b>

**For more information  
call 1-800-PRAXAIR.**

**1-800-772-9247**  
(Select option 1 from menu)



*A variety of storage tanks are available to meet your specific needs.*

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Printed in the United States of America  
8-01

P-8643 3M