

CryoEase® Microbulk Solutions for Hydrogen and Helium

A cost-effective alternative to cylinder gas supply



CryoEase microbulk solutions option for your hydrogen and helium needs offers the same benefits, same enhancement and same great supply mode as we have been providing for nitrogen, argon and oxygen. We developed this supply option for customers looking for a cost-effective, reliable alternative to cylinders. We've engineered a storage system for hydrogen and helium, enabling the module to be installed and filled on-site, replacing traditional cylinder change-outs.

Because the modules are engineered to be installed and filled on-site, we can provide you with the advantages of bulk supply when your usage is less than traditional bulk delivery volumes.

Microbulk delivery helps you maximize safety at your site.

- Eliminates cylinder handling.
- Reduces the number of deliveries.
- Reduces risk of product mix-up.

Microbulk delivery improves quality control, too.

- Dedicated containers eliminate potential contamination.
- Inventory management is simplified.
- Operating efficiencies are increased through constant onstream supply.

Greater efficiencies can help reduce costs.

- Eliminates residual product returned in high pressure cylinders.
- Eliminates lost-cylinder costs.
- Decreases number of invoices and streamlines purchase orders, which can reduce administrative and transaction costs.
- Eliminates cylinder change-outs, which can reduce labor costs.
- Frees up space formerly used for cylinder storage.
- Provides flexibility to add or remove modules to adjust for changes in volume.



Hydrogen / Helium Storage Module Features



DESIGN DETAILS		
Parameters	Specification	Units of Measure
Total capacity (@ 3,000 psi)	8,000	Scf
Service pressure	3,000	PSIG
Dimensions (w x d x h)	52 x 56 x 77	Inches
Total weight	4,900	Pounds
Safety	D.O.T. rated tanks	
EQUIPMENT DETAILS		
Description	Material	Details/Comments
Cylinders	16 (500 scf) high strength carbon steel	Meets D.O.T. requirements
Valves	Bronze	Per CGA
Relief vent	Stainless steel	None
Thermal relief device	Fusible rupture disk @ 4,500 psi for each cylinder	Meets D.O.T. requirements
Control panel	Regulator, gauge and isolation valve mounted on front of frame for easy viewing and access	Flow capacity up to 1500 scfh and delivery pressure range from 50 to 250 psig
SITE REQUIREMENTS		
Item	Details	
Foundations required	None – Can be sited on macadam surfaces or gravel with proper supports	
Electrical	None – Class 1, Division 2, Group B siting requirement for hydrogen	
Water	None required	
Phone	None required	
Grounding rod	Required at site	
Siting distances	Per NFPA 55 – Air Products will provide site evaluation	
Installation	Steel frame with forklift channels	
TRANSPORTATION REQUIREMENTS		
Item	Details	
Trailer design	Complies with 49 CFR	
Transport requirements	Delivered by tractor trailer and set up for operation by Air Products	

For More Information

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