



# PORTAFLEX™ 450 Portable Microbulk System

## Flexible portability for quick response



### Portable, High-Performance PORTAFLEX™ 450 ZX VHP Microbulk Storage System

Designed and built for high-pressure and high-flow applications, Linde’s PORTAFLEX™ 450 ZX VHP microbulk storage system provides flexible portability to quickly respond to demanding industrial gas applications. Easily transported, the system is rated at flow rates of up to 2000 SCFH while sustaining 420-450 psig.

### Safe Portability

The PORTAFLEX 450 ZX VHP system features a dedicated metal pallet with durable exterior coating for maximum corrosion resistance. To ensure safe portability, the pallet features forklift slots to protect both plumbing and tank during transportation and application use.

### Microbulk Efficiency and Productivity

As part of the microbulk gas delivery system, the PORTAFLEX 450 ZX VHP microbulk storage system is an on-site, cost-effective solution that ensures an uninterrupted gas supply to increase productivity. The included telemetry system monitors supply levels and automatically generates orders for on-time deliveries. As a result, product outages are reduced and less time is spent managing inventory and placing orders.

Features	Benefits
Quick response	Portable design makes it easy to deploy and place to meet unexpected or changing application needs
High performance	High-flow external aluminum vaporizer and pressure builder system provides up to 2000 SCFH at 420 to 450 psig Dual relief valves and rupture discs with a diverter valve
Small footprint	Vessel and vaporizers are secured to a dedicated metal pallet frame for a smaller footprint
Portable flexibility	Easily transportable with a forklift Metal pallet incorporates forklift slots to protect plumbing and tank during transportation and application use

## Specifications

Capacity	DOT Transporting Over The Road	Filling On-Site
Liquid (Gross) liters	450	450
Liquid (Net liters)	420	420
Gas (LIN) ft <sup>3</sup>	7,922	10,332
Gas (LOX) ft <sup>3</sup>	10,519	12,760
Gas (LAR) ft <sup>3</sup>	10,241	12,478
Gas (CO <sub>2</sub> ) ft <sup>3</sup>	7,960	8,200
Gas (N <sub>2</sub> O) ft <sup>3</sup>	7,516	9,881
<b>Performance</b>		
NER (LIN) % per day	1.6	1.6
NER (LAR/LOX) % per day	1.0	1.0
NEW (CO <sub>2</sub> /N <sub>2</sub> O) % per day	0.5	0.5
Gas Flow (LIN/LOX/LAR)* SCFH	2,000**	2,000**
Gas Flow (CO <sub>2</sub> /N <sub>2</sub> O)	665	665
<b>Dimensions &amp; Pressure Ratings</b>		
Cylinder Size: D x H inches	30 x 69.3	30 x 69.3
Base Dimensions: W x D x H inches	47 x 47 x 82	47 x 47 x 82
Tare Weight lb.	1,450***	1,450***
Full Weight lb. (LIN/LOX/LAR)	2,024/2,321/2,509	2,253/2,583/2,833
Relief Valve Setting psig	500	500
DOT Rating	4L412	4L412

\* At 450 psig sustained pressure.

\*\* Higher flows can be achieved with reduced duty cycles and/or additional vaporization.

\*\*\* Weights include tank and pallet, are approximate and vary with pallet design.

### A Great Start for Your New Laser Installation

Are you looking for a start-up gas supply system for your new laser? Linde's PORTAFLEX™ 450 is the answer. This portable gas supply system can be quickly set up to provide adequate volume for initial use. The PORTAFLEX 450's features can help you realize the gas volume that your system will require long term. It can fill the gap between machine installation and gas supply installation, eliminating the use of cylinder clusters with swap outs and downtime.

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