



## Turnkey gas supply and gas delivery system for the DESKTOP METAL™ furnace.



### DESKTOP METAL™ Furnace

Fully-automated and sized to fit through a doorway, the DESKTOP METAL™ Furnace delivers high-quality sintering in a form factor suitable for shop environments. With high thermal uniformity and low gas usage, the furnace heats parts in a vacuum-enabled chamber to just below their melting point, fusing the metal particles together to create sintered parts with densities up to 98%. Featuring an external gas hookup and adjustable shelving totaling 3,000 square centimeters of surface area for sintering parts, the furnace scales to support mid-volume production of high-quality, dense metal parts ready for end-use applications.

### Sintering Process Rack

Linde's Sintering Process Rack is a reliable gas supply solution that helps you spend more time printing and less time changing out cylinders. The rack features two bays that hold two cylinders of Praxair's ADDvance™ Sinter 250ADD gas blend on one side and two cylinders of ADDvance Argon 5.0ADD on the other. The cylinders connect to a switchover for continuous gas flow and are monitored by an adjustable pressure alarm that signals when it is time for a cylinder to be replaced.

To help maintain gas purity, the cylinders feed gas to the mounted two-stage regulation panels featuring minimal metallic wetted surfaces. The regulation panels provide and maintain accurate pressure and flow rates even as cylinder pressure declines. Gases are routed to the side mounted process panel valve, enabling users to quickly change gases with the turn of a valve as material needs change. Praxair's Sintering Process Rack ships completely assembled for quick and easy installation. It includes a 10-foot flexible stainless steel hose to connect the rack to your furnace.

Features	Benefits
Reliable gas supply with low pressure alarm	Reduces process interruptions
High-quality, two-stage regulation	Protects gas purity
Two-sided rack holds two cylinders of ADDvance™ Argon 5.0 ADD and two cylinders of ADDvance Sinter 250 ADD	Reduces cylinder changeouts
Switchover process panel valve	Allows fast gas changes as material and part needs change

## Sintering Panel Low Gas Supply Alarm



Front of Process Panel Low Gas Supply alarm

The attached process panel low gas supply alarm is a low voltage, four-channel system that may be plugged into 120/220 volt, 50/60 hertz power. It provides monitoring for up to four gas supply sources, two cylinders of ADDance Argon 5.0 ADD and two cylinders of ADDance Sinter 250 ADD gas blend.

The system also has an audio report that can be shutoff, while the light stays on until the cylinder has been replaced. Additionally, a transformer steps down the voltage to a much safer nine volts which is sent to the alarm via a two-conductor wire. This provides a safety advantage in that if the control wire is damaged, users are protected from exposure to the primary power.

## Ordering Information

Linde's Sintering Process Rack can be ordered with the following part number.  
PRX ADD2DM

## High Quality Gases for Sintering

### ADDvance™ Argon 5.0 ADD Pure Gas

Cylinder part number	AR 5.0ADD-T
Gas Description	Argon
Cylinder contents	336 CF (9.15CM <sup>3</sup> )
Gas flow rate	105 CFH (2.97CM <sup>3</sup> )
Cylinder pressure	Less than 2,900 psig/200barg
CGA Connection	USA 580 (right-hand thread)



### ADDvance™ Sinter 5.0 ADD Gas Blend

Cylinder part number	AR HY2.85ADD-K
Gas Description	2.85% Hydrogen in Argon
Cylinder contents	212 CF (6.00CM <sup>3</sup> )
Gas flow rate	26 CFH (0.74CM <sup>3</sup> )
Cylinder pressure	Less than 2,900 psig/200barg
CGA Connection	USA 350 (left-hand thread)



Linde Inc  
10 Riverview Drive, Danbury CT 06810, USA  
Phone 1.800.225.8247 www.lindeus.com