MetalMaster®
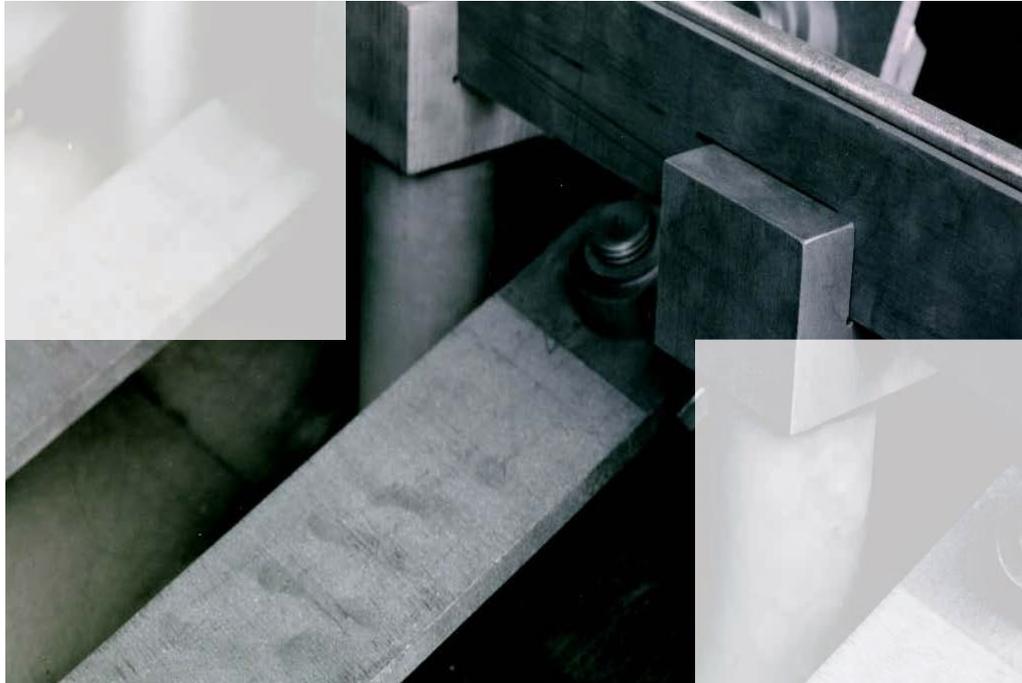## Reliable Versatility

Ipsen

The MetalMaster® series of multi-purpose vacuum furnaces has been the workhorse of the heat-treating industry for more than five decades. While materials and processes change, the MetalMaster continues to combine high-quality performance with proven technology that yields repeatable results. With hundreds of installations worldwide, it is at the forefront of advances in the thermal processing industry.
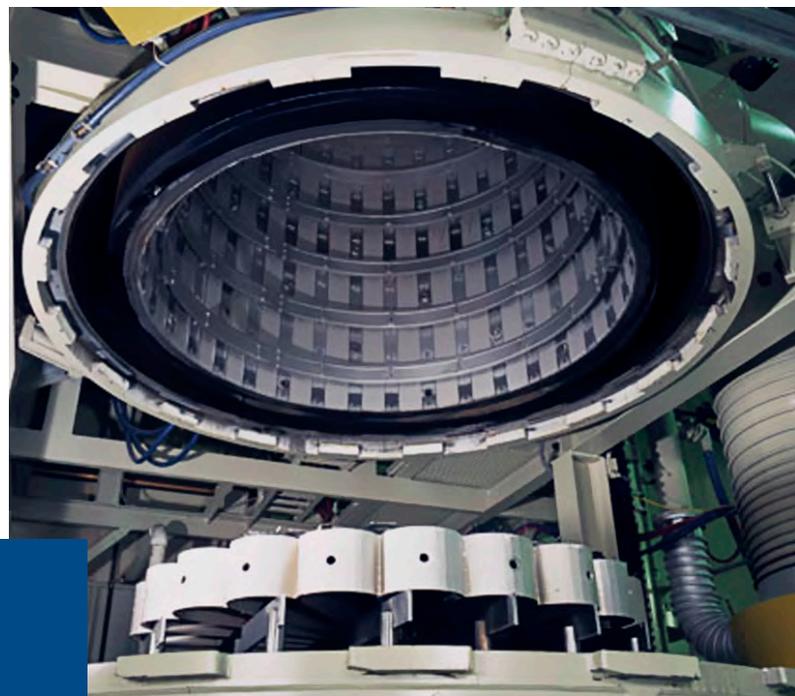

Ipsen delivers reliability with a steadfast industry favorite that proves itself time and time again. If your heat-treating, brazing or other thermal processing applications require a rugged, cost-effective vacuum furnace, then Ipsen's field-proven MetalMaster is the best choice for you.

This multi-purpose vacuum furnace line is available in all-metal or graphite insulated hot zone packages, as well as several standard load sizes (horizontal or vertical). In addition, its technology is cost-effective, versatile and adaptable, allowing you to meet your process and application requirements with ease.

Find out more about the MetalMaster furnace's unique features, capabilities and benefits by visiting www.IpsenUSA.com/MetalMaster

Features

- 2-bar gas quench

- Excellent temperature uniformity of ±5 °F (±3 °C) or better with end element option

- Superior pumping performance

- Optimized cooling system design

- Versatile options let you customize the furnace for your specific process and application requirements

- Advanced controls system provides precise, user-friendly operation

- Wide variety of hot zone insulation packages

- 360° gas cooling nozzles and heating elements for precise temperature control

MetalMaster Sizes

Horizontal	
Load Size (W x H x D)	Load Capacity
18" x 14" x 24" (457 mm x 355 mm x 610 mm)	Up to 400 lbs. (Up to 181 kg)
24" x 18" x 36" (610 mm x 457 mm x 914 mm)	1,000 lbs. (454 kg)
24" x 24" x 36" (610 mm x 610 mm x 914 mm)	1,200 lbs. (544 kg)
24" x 24" x 40" (610 mm x 610 mm x 1,016 mm)	1,500 lbs. (662 kg)
36" x 36" x 48" (914 mm x 914 mm x 1,219 mm)	3,000 lbs. (1,361 kg)
36" x 36" x 72" (914 mm x 914 mm x 1,829 mm)	3,500 lbs. (1,588 kg)
48" x 48" x 60" (1,219 mm x 1,219 mm x 1,524 mm)	4,000 lbs. (1,814 kg)
48" x 48" x 72" (1,219 mm x 1,219 mm x 1,829 mm)	5,000 lbs. (2,268 kg)
48" x 48" x 96" (1,219 mm x 1,219 mm x 2,438 mm)	6,000 lbs. (2,722 kg)

Custom sizes available upon request.

Vertical	
Load Size (D x H)	Load Capacity
48" x 54" (1,219 mm x 1,372 mm)	3,000 lbs. (1,361 kg)
48" x 84" (1,219 mm x 2,134 mm)	5,000 lbs. (2,268 kg)
60" x 60" (1,524 mm x 1,524 mm)	4,000 lbs. (1,814 kg)
72" x 72" (1,829 mm x 1,829 mm)	5,000 lbs. (2,268 kg)
72" x 84" (1,829 mm x 2,134 mm)	5,000 lbs. (2,268 kg)
84" x 84" (2,134 mm x 2,134 mm)	6,000 lbs. (2,722 kg)
120" x 48" (3,048 mm x 1,219 mm)	8,000 lbs. (3,629 kg)
120" x 72" (3,048 mm x 1,829 mm)	10,000 lbs. (4,536 kg)
120" x 96" (3,048 mm x 2,438 mm)	10,000 lbs. (4,536 kg)
130" x 96" (3,302 mm x 2,438 mm)	12,000 lbs. (5,443 kg)

Choice of Hot Zone

Choosing a MetalMaster hot zone is as simple as selecting the design and construction material applicable to your process requirements. Available designs include all-metal, metal/ceramic fiber, graphite board/felt, bonded graphite board/ceramic fiber and grafoil/felt design.

Carbon composites (CFC) are also available to prevent mechanical damage and extend the lifespan of your hot zone.

Gas Quenching System

All MetalMaster furnaces include a specially engineered heat exchanger and turbine blower system that is designed to optimize gas flow for more efficient cooling. These solutions are available with cooling motors that reach up to 150 HP.

About Ipsen.

Since 1948, Ipsen has been designing and manufacturing industrial atmosphere furnaces, vacuum furnaces and supervisory control systems. This advanced equipment is designed for a variety of industries, including Aerospace, Automotive, Commercial Heat Treating, Energy, Medical and Tool and Die.

Much like our founder, Harold Ipsen, we believe that innovation drives excellence. We are committed to delivering quality solutions for a range of applications that enable our customers to improve titanium medical implants, develop more efficient cars and jet engines and transform space exploration. With nearly 70 years of thermal processing experience and thousands of systems installed worldwide, no company can provide 360° support for all of your heat-treating needs better than Ipsen.

Vacuum Heat Treatment

Ipsen delivers proven vacuum heat-treating technology that allows you to achieve maximum flexibility and meet strict industry demands. Whether your process can benefit from increased heating and cooling control, precise case depth and uniformity or flexible quenching options, Ipsen has the furnace for you. Ipsen's vacuum furnaces also offer a wide range of sizes and versatility of processes, including annealing, brazing, hardening, low-pressure carburizing, solution nitriding, stress relieving and tempering.

Atmosphere Heat Treatment

With one of the largest installed bases of atmosphere furnaces, Ipsen has the experience necessary to provide customers with optimum equipment they can trust and rely on for full-scale solutions. Ipsen's ATLAS batch atmosphere furnace line continues this tradition, combining the achievements of past atmosphere furnaces with the evolutionary innovations of the future – incredibly advanced, energy-efficient controls, ease of integration and more.

Aftermarket Support

Count on Ipsen's responsive Aftermarket Support Team to help keep your equipment running at peak performance and minimize costly downtime by meeting your needs for furnace controls upgrades, replacement hot zones, parts, maintenance and service. When you need support, call Ipsen's Aftermarket Support Helpline: 1-844-Go-Ipsen.

With production locations in America, Europe and Asia, along with representation in 34 countries, choosing Ipsen means choosing a partner in success.

Ipsen
984 Ipsen Rd.
Cherry Valley, IL 61016
Toll Free: 1-800-727-7625
Int'l: +1-815-332-4941
Sales@IpsenUSA.com
www.IpsenUSA.com/MetalMaster