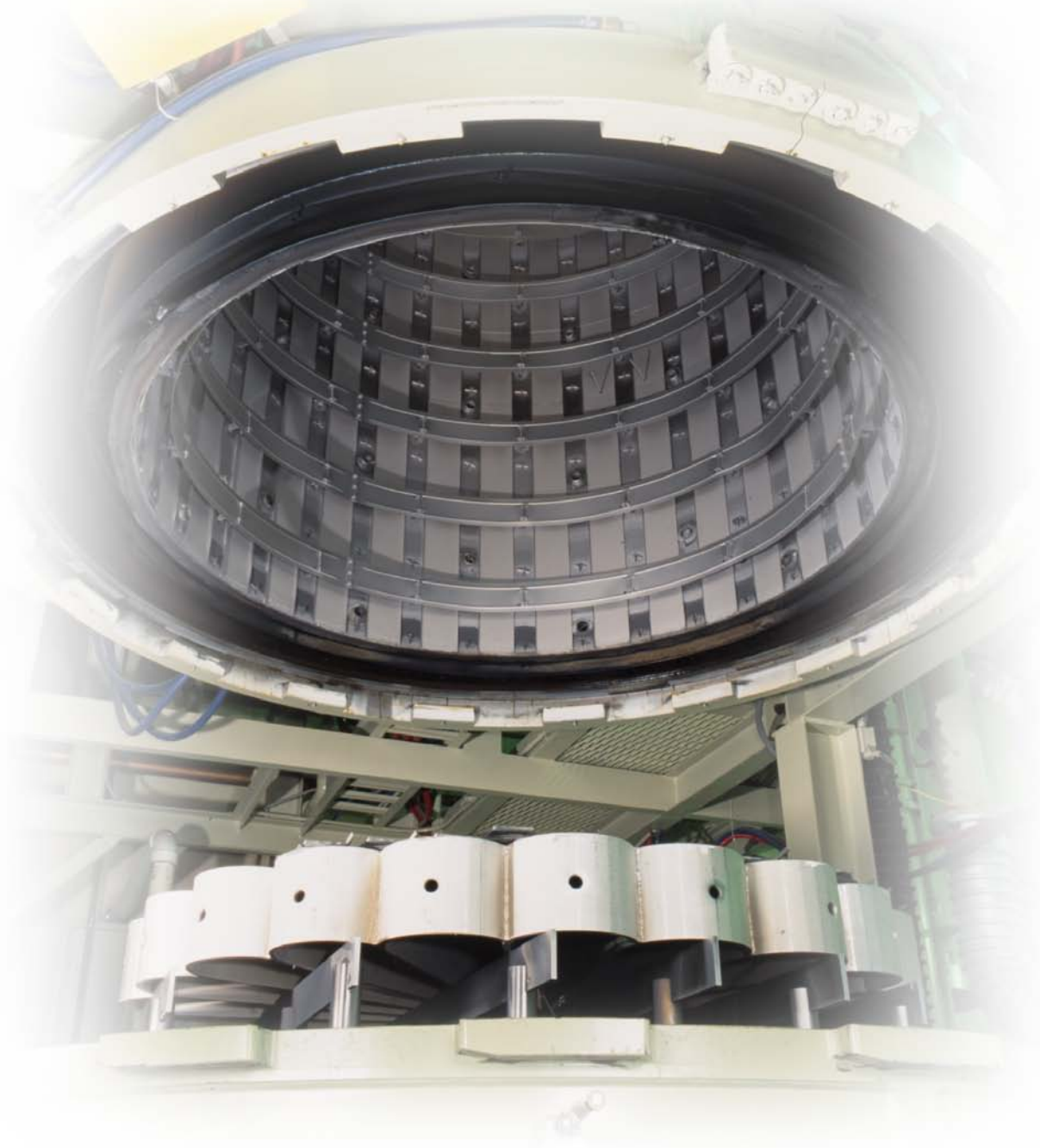
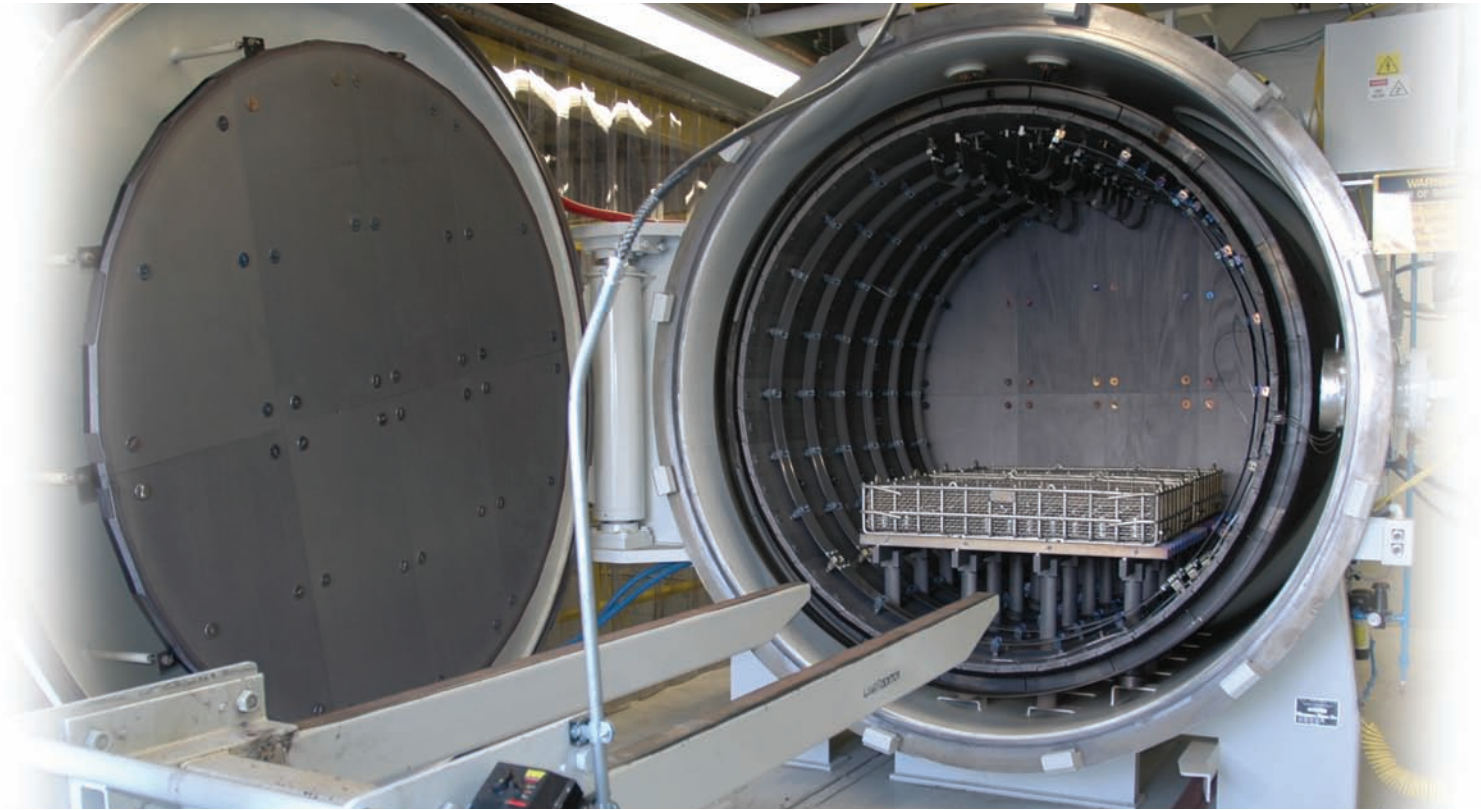




Ipsen *MetalMaster*™. Multi-Purpose Vacuum Heat Treating & Brazing Furnace.





MetalMaster™

The MetalMaster™ series of multi-purpose vacuum furnaces has been the workhorse of the heat treating industry for nearly three decades. With more than 500 installations worldwide, it has been in the forefront of advances in thermal technology.

Incorporating features such as Ipsen's CompuVac Control System and latest, state of the art insulation materials, MetalMaster™ furnaces are available in a wide variety of sizes and configurations...more, in fact, than any other standard furnace on the market today.

If your heat treating, brazing or other thermal processing application requires a rugged, cost-effective vacuum furnace with a great deal of versatility and adaptability, then the field proven MetalMaster™ series from Ipsen is the best choice.

Cost-Effective, Versatile, Adaptable

MetalMaster™ horizontal and vertical vacuum furnace technology is cost-effective, versatile, and adaptable

to meet your process and application requirements. From assisting the efforts of NASA by providing brazing technology for their rocket nozzle design, to support aerospace suppliers brazing turbine blades, vanes, diffusion cages, and inner and outer liners for combustion chambers...you can rely on Ipsen for your brazing application needs.

Features:

- Excellent temperature uniformity $\pm 5^\circ$ or better
- Superior pumping performance
- Optimized cooling system design
- Versatile and adaptable to application requirements
- State of the art control system
- Flexible batch and continuous furnace designs
- Purging and gas cooling packages tailored to meet your most demanding process requirements.
- Wide variety of hot zone insulation packages.
- 360° gas cooling nozzles and heating elements for precise temperature control.

Proven Performance

The Ipsen MetalMaster™ series of multi-purpose vacuum furnaces offers a wide variety of sizes and configurations, including horizontal or vertical designs. As users also have a choice for hot zones, pumping systems and gas cooling options, the MetalMaster™ is ideal for almost any heat treating, brazing or other thermal processing application. The gas quench system features a specially engineered heat exchanger and turbine blower designed to optimize gas flow for more efficient cooling. In addition to Ipsen's standard computer control systems, MetalMaster™ furnaces may be ordered with other high-productivity options, including specialized instrumentation, increased pumping capability, and material handling systems.



Wide Range of Standard Sizes

MetalMaster™ furnaces are available in more standard load sizes (horizontal or vertical), a wider choice of hot zones, pumping systems and gas cooling options than any other vacuum furnace.

Choice of Hot Zone

Choosing a MetalMaster™ hot zone is as simple as selecting the design and construction material applicable to your process requirement. Available designs include all-metal, metal/ceramic fiber, graphite board/felt, bonded graphite board/ceramic fiber, and grafoil/felt design. Carbon composites (CFC) are available to prevent mechanical damage and extend hot zone life.

Gas Quenching System

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

High-Productivity Options

In addition to its reputation for reliability, the MetalMaster™ series is versatile and adaptable to your application requirements, both current and future. Optional features include material handling systems, increased pumping capability, specialized instrumentation, and custom control systems to meet your specific process application.



About Ipsen

Ipsen is the largest manufacturer of heat treating equipment in the world. Our products include atmosphere and vacuum industrial furnaces and engineered ceramic components. Our aftermarket provides replacement parts, hot zones, rebuilds and retrofits, and exceptional technical support.

Together with our sister company, Ipsen International, Kleve, Germany, we are at the forefront of providing our customers with the latest technologies and a fast expanding array of product solutions—all designed to meet the accelerating demand for more economy, efficiency and environmental safety.



Ipsen, Inc.

984 Ipsen Road, Cherry Valley, IL 61016 • Ph: 815.332.4941 • Fax: 815.332.4995 • Toll Free: 800.727.7625
1946 E. Cherry Lane • Souderton, PA 18964 • Ph: 215.723.8125 • Fax: 215.721.7095 • Toll Free: 800.359.7675

