

If you can dream it, we can build it.



WE DELIVER PERFORMANCE.

From time-proven standard models to custom engineered systems, Ipsen delivers.



For over 60 years, Ipsen has produced advanced thermal processing systems for simple tools to giant wind turbine gears.

From the modular-built Titan vacuum furnace, to TurboTreater®, the backbone of Ipsen's standard product line, to specialized furnaces that perform carburizing, ivadizing, aluminum brazing or other processes, to fully custom engineered systems built around your unique application, Ipsen is the company that savvy heat treaters trust when they need to do the job right.



No other company can make your ideas reality better than Ipsen.

If your process requires a custom heat treating solution, Ipsen's world class engineering team has the experience and the resources to design and deliver the perfect system for virtually any specialized job. The Ipsen team has developed custom-engineered vacuum furnaces that include acetylene-based vacuum carburizing (AvaC™), solution nitriding (SolNit™), and aluminum deposition and brazing.



Count on Ipsen to keep your vacuum furnace systems operating in peak condition.

From the moment you take delivery of your new system, the Ipsen support team swings into action, providing on-site installation supervision, training and start-up assistance. Beyond the installation phase, Ipsen is there for you with responsive field support, parts, and training to help you improve your process. Ipsen maintains a national fleet of service technicians to assist you wherever you are in North America. We can even provide remote monitoring and troubleshooting if you need it.

Titan



Affordable Titan allows heat treaters to augment their capabilities quickly and economically.

- Ships 2 weeks after order placement
- Globally certified chamber and installs in just one day
- Self-contained, skid-mounted system
- 2 or 12 bar nitrogen or argon quench
- Graphite or optional all metal hot zone
- Purchase, lease or rent options

TurboTreater®



TurboTreater offers high pressure gas quenching up to 12 bar for hardening, tempering, brazing, sintering, and annealing.

- Faster cycle times, improved workload results
- Energy-efficient design
- Hot zone in self contained plenum for easy removal
- High pressure cooling system for fast quenching
- Patented gas quenching system reduces gas consumption
- 360° cooling uniformity

VFS® HEQ



The VFS Horizontal Quench vacuum furnace is one of the most cost-effective furnaces on the market.

- Optimum performance in a wide range of applications
- External quench enclosure for easy maintenance
- Door-mounted quench nozzles provide even gas distribution
- Hot zone designs include graphite and all-metal radiation shields



Fasteners

Reliability and repeatability are key to processing components such as fasteners. With the largest installed base of vacuum and atmosphere furnaces in the world, you can be confident of the equipment and support available through Ipsen.



Tool & Die

When tool and die makers send out their products for heat treating, the first question many of them ask is "Do you have an Ipsen TurboTreater?"

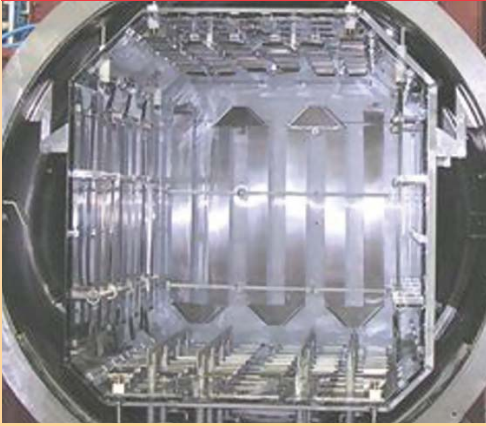
It is the furnace many vacuum heat treating specifications were written around, including NADCA H-13 specifications.

Medical

Part cleanliness is critical in the processing of medical components. Whether processing titanium, stainless steels, or other proprietary alloys, Ipsen's advanced control systems, robust hot zone designs, and energy efficient vacuum pumping systems will provide the surface cleanliness you require.



Aluminum Brazing



Ipsen aluminum brazing furnaces are available for a variety of throughput needs. All furnaces feature individually controlled heating elements that surround the work zone to minimize cycle time and provide precise heating. Jointless elements eliminate resistance build-up and hot spots.

- Batch and continuous configurations are available

AvaC™



AvaC™ is a proven process for vacuum carburizing with acetylene. One of the most important advantages of this process is high carbon availability, ensuring homogeneous carburizing even for complex geometries and very high load densities.

- No intergranular oxidation
- Precise case depth uniformity
- Superior blind hole performance
- Virtually soot-free process

Liquid or Gas Quench



Ipsen liquid or gas vacuum furnaces utilize a two-chamber, horizontally mounted configuration with a front chamber quench of up to 12 bar, and the rear chamber for oil quench.

- Sizes available up to 36" x 36" x 48" (W x H x L)
- Internal load transfer system with variable speed and simple chain drive
- Variable speed oil agitation
- Low voltage heating elements
- Cam-over center locking internal door

Automotive

The automotive industry is the largest user of heat treated components. Whether your project requires a vacuum or atmosphere solution, batch or continuous, Ipsen can provide the most cost-effective solution in the time frame you require.



Land-Based Turbines

Unscheduled downtime is unacceptable in the power generation field. Companies such as General Electric and Siemens trust the quality and consistency of components brazed or heat treated in Ipsen vacuum furnaces.



Commercial Heat Treat

Commercial heat treaters require performance, reliability and flexibility to meet their customers' demands. To maximize profits, their facilities run 24/7 with no unscheduled down time. That's why a majority of commercial heat treaters have chosen to invest in thermal processing equipment designed and manufactured by Ipsen.

Advanced Engineered Vacuum Furnace Systems



Ipsen excels at engineering and manufacturing innovative, highly technical thermal processing systems for unique or special applications. Furnace configurations can be horizontal or vertical, with manual/automatic loading systems based on load and speed requirements.

- Specific process requirement to 3,000°F, with vacuum pressure down to 10^{-7} torr and quench pressures to 20 bar
- Custom load size/configurations up to 700 cu ft
- Specialized material handling systems that are fully automatic and capable of loads in excess of 15 tons
- Advanced controlled gas cooling systems for improved product/process results
 - Better cooling uniformity/speed
 - Isothermal hold – Interrupted quench
- Computerized simulation of process and part performance

IPSEN IS AT

THE FOREFRONT OF

NEW AND

INNOVATIVE DESIGNS.

CALL US TO DISCUSS

YOUR NEEDS AT

800-727-7625



Aerospace

Meet and exceed your customers' critical aerospace needs including compliance with NADCAP requirements such as AMS-2769 and AMS-2750D. Ipsen can provide horizontal or vertical configurations to meet your specific component processing specifications.

Alternative Energy

The quality and durability demands of the geothermal and solar industries are approaching aerospace levels. Invest in equipment with a proven track record, capable of achieving these stringent requirements today and in the future.



Wind Energy

Large-scale wind generation equipment, from 900 kW to 2 MW capabilities, ranges from 164 - 262 feet in height. Access to the critical turbine components at the top of these structures is both time-consuming and costly. For durable and dependable components, manufacturers count on the proven performance of Ipsen vacuum and atmosphere furnaces.





Ipsen, Inc. • www.ipsenusa.com

984 Ipsen Road, Cherry Valley, IL 61016 • Ph: 815.332.4941/800.727.7625 • Email: sales@ipsenusa.com