What separates companies today is speed – the speed to bring products to the market faster and process more parts in less time. Boasting advanced technology and hundreds of installations worldwide, Ipsen’s TurboTreater® system continues to set the industry standard for fast cooling rates and high-pressure gas quenching.

Set yourself apart from the crowd with a vacuum heat-treating system that offers ultimate performance and reliability. Featuring internal quenching with pressures up to 20 bar, the TurboTreater works well with heavy loads and provides optimal results for multiple processes – hardening via high-pressure quenching, tempering, brazing, sintering and annealing.

This multi-purpose vacuum furnace line is also available in all-metal or graphite insulated hot zone packages, as well as several standard load sizes in horizontal or vertical configurations.

Customize yours with a unique hot zone configuration/insulation package, quench pressure, pumping system and controls system.

Find out how the TurboTreater can ramp up your business by visiting www.IpsenUSA.com/TurboTreater

TurboTreater Benefits

• Achieve unparalleled speed and efficiency

• Decrease cycle times up to 20%, reduce gas consumption up to 40% and improve hardness with a patented, high-velocity internal gas quench system*

• Minimize required floor space through small footprint and optimized design

Innovations that Matter

• Cooling system design generates the highest heat transfer coefficient of any furnace in its class

• Flapper nozzle system ensures a uniform quench in every load regardless of size or configuration (convection option)

• Quarter-twist graphite or molybdenum heating element support hanger makes it easy to service and maintain with the elimination of threaded connections

• Flare-locking rim for molybdenum cooling gas nozzles provides efficiency of gas flow and secures them into a rounded extrusion in the plenum wall

*Compared to conventional vacuum furnaces
When you refuse to compromise on quality, the TurboTreater heat-treating systems are the solution. With sizes and configurations to fit all your needs, don’t settle for less.

**TinyTurbo®** – Don’t be fooled by its small physique. The TinyTurbo packs a punch with all the features and benefits of its full-sized counterparts in half the space.

**SuperTurbo®** – When you need to get the job done, don’t look further than the SuperTurbo furnace. From large loads to complex parts, this powerful vacuum furnace takes flexibility to a whole new level.

**VerticalTurbo** – Take your capabilities to new heights with this heavy hitter. Capable of heat treating large parts, the VerticalTurbo also delivers the space-saving benefits of a vertical configuration.

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<table>
<thead>
<tr>
<th></th>
<th>TinyTurbo®</th>
<th>TurboTreater®</th>
<th>SuperTurbo®</th>
<th>VerticalTurbo</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Load Capacity</strong></td>
<td>Up to 400 lbs.</td>
<td>1,500 lbs. to 8,000 lbs.</td>
<td>3,000 lbs. to 8,000 lbs.</td>
<td>3,000 lbs. to 5,000 lbs.</td>
</tr>
<tr>
<td></td>
<td>(Up to 181 kg)</td>
<td>(682 kg to 3,629 kg)</td>
<td>(1,361 kg to 3,629 kg)</td>
<td>(1,361 kg to 2,268 kg)</td>
</tr>
<tr>
<td><strong>Load Size</strong></td>
<td>18” x 14” x 24”</td>
<td>24” x 24” x 36”</td>
<td>36” x 36” x 48”</td>
<td>48” D x 54” H</td>
</tr>
<tr>
<td></td>
<td>(457 mm x 355 mm x 610 mm)</td>
<td>(610 mm x 610 mm x 914 mm)</td>
<td>(914 mm x 914 mm x 1,219 mm)</td>
<td>(1,219 mm x 1,372 mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>48” x 48” x 72”</td>
<td>to 60” x 48” x 100”</td>
<td>to 72” D x 72” H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1,219 mm x 1,219 mm x 1,829 mm)</td>
<td>(1,524 mm x 1,219 mm x 2,540 mm)</td>
<td>(1,829 mm x 1,829 mm)</td>
</tr>
</tbody>
</table>

*Custom sizes available upon request.*

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This gas path is specific to the TurboTreater furnace design; all models in the TurboTreater product line feature similar technology, but are modified based on hot zone size and configuration.
Our Story

Backed by nearly 70 years of experience, it is our mission to strengthen heat treatment through expert-driven solutions. We are committed to delivering proven technology for a range of applications that enable you to transform space exploration, improve titanium medical implants and develop more efficient cars and jet engines.

Innovation

Harold Ipsen founded Ipsen in 1948 with a vision of creating products and technologies that continuously push the boundaries of innovation to create a future of thermal processing excellence. His commitment to advancing technology is the inspiration behind our vision for the future; a future where we continue to strengthen and accelerate innovations in almost every industry. Whether it is our versatile heat treatment systems or advanced process technology, we aspire to provide cutting-edge solutions that continuously improve and refine your operations.

Technology

At the core of our solutions are atmosphere and vacuum heat-treating systems and supervisory controls systems, which are used in many mission-critical applications. This advanced equipment is developed for Aerospace, Automotive, Energy, Medical, Tool & Die and various industries across the globe. Leading our industry with more than 10,000 systems installed worldwide, we have the experience necessary to provide optimum technology that allows you to achieve maximum flexibility and meet strict industry demands. We offer global modular platforms, as well as custom designs for specialized processes and requirements.

Services

We also provide comprehensive service and support every step of the way, including assistance with developing your process, factory layout planning and integration with current production processes and factory operating systems. You can also count on our responsive Ipsen Customer Service (ICS) Team to help keep your equipment running at peak performance and minimize costly downtime through upgrades, retrofits, parts, maintenance, service and training.

With an extensive network of global locations and partnerships in America, Europe and Asia, along with representation in 34 countries, we continue to provide expert-driven solutions that strengthen heat treatment throughout the world.