ATLAS
Precision and Versatility at its Finest
Ipsen’s ATLAS atmosphere line delivers precision and versatility through intelligent interfaces, advanced controls and ease of integration.

In addition, the use of innovative technologies, such as Carb-o-Prof®, Recon® III Burners, SuperQuench® and TurboQuench™, provide you with equipment that is intuitive, efficient and easy to operate. Available in both single- and double-chain models, the ATLAS line provides full-scale solutions for all of your heat-treating needs.

**ATLAS At-A-Glance:**

- Ability to integrate into existing atmosphere furnace lines (any brand)*
- Intelligent controls with predictive process capabilities – Carb-o-Prof
- Compact footprint
- Ease of maintenance, thanks to a cartridge-design heat fan assembly, shelf-mounted quench oil heaters and oil circulation pump, safety catwalks and more
- Efficient heating combustion system, which provides energy and cost savings
- Variable-speed quench agitation, allowing users to achieve and maintain better quenching control
- Uniform quenching, resulting in minimized distortion and high part quality

**Energy Efficiency**

Ipsen’s Recon III Burners increase thermal efficiency up to 75% – simply by utilizing the heat from the exhaust gases to preheat the combustion air. These burners are paired with single-ended radiant tubes (SERT) that are fitted with special ceramic inner tubes and set apart by their low noise levels, high durability, low maintenance and easy installation. This allows them to provide ideal heating while also optimizing gas consumption and achieving maximum energy efficiency.

**Exceptional Performance**

Ipsen’s SuperQuench and TurboQuench oil-quenching systems reduce distortion, improve the properties of steel and consistently achieve uniform surface and core hardening. These systems feature a variable-speed agitation system that produces a uniform and adjustable flow of oil throughout the load and allows the oil flow to be adjusted based on section size, material and load density. They can also tackle even the most challenging alloys by reducing the hardness spread and increasing the overall throughput.

<table>
<thead>
<tr>
<th>Maximum Load Dimensions: (W x L xH)</th>
<th>Maximum Load Weight Capacity:</th>
<th>Operating Temperature:</th>
<th>Quench Oil Capacity:</th>
<th>Load Chain Configuration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>24” x 36” x 30” (610 mm x 915 mm x 760 mm)</td>
<td>1,100 lbs. (500 kg)</td>
<td>1,380 °F – 1,800 °F (750 °C – 985 °C)</td>
<td>1,030 gal. (3,900 L)</td>
<td>Double</td>
</tr>
<tr>
<td>36” x 48” x 38” (915 mm x 1,220 mm x 965 mm)</td>
<td>3,500 lbs. up to 3,750 lbs. (1,600 kg up to 1,700 kg)</td>
<td>1,380 °F – 1,800 °F (750 °C – 985 °C)</td>
<td>2,400 gal. up to 3,500 gal. (9,085 L up to 13,250 L)</td>
<td>Double or Single</td>
</tr>
</tbody>
</table>

*Compatible with most single-chain, in-out-style atmosphere furnace lines*
Carb-o-Prof – Intuitive Controls

Carb-o-Prof software combines more than six decades of knowledge and expertise in a single controls system. Carb-o-Prof delivers an extensive recipe database, time- and cost-saving simulator with C-Profile optimization and adaptive control that ensures you get the best part quality every time.

Simulation Software

Users are able to compute the expected carbon profile of their materials, as well as immediately review the process results for their specific load – all without wasting valuable parts, time or resources.

C-Profile Optimization

Using pre-specified target parameters, users can define a target carbon-content curve. This ensures parts within the same load are consistent in both case depth and hardness.

Recipe Database

This system’s database allows users to easily create and store hundreds of recipes, all based on a wide variety of materials. The program also helps you avoid errors by limiting the input ranges, thus maintaining a safe operation.

System Integration

Ipsen’s components are configured for maximum compatibility for both the single- and double-chain ATLAS models. The ATLAS single-chain model utilizes the same push-pull chain loader as the industry standard, allowing it to integrate into existing lines for any brand of atmosphere furnace with ease.*

Manufactured and Serviced in the USA

The ATLAS single-chain model is manufactured in the United States, and our extensive U.S. Field Service and Aftermarket Support network provides atmosphere furnace support, including parts, service, retrofits, training and more.

Quality Insulation

The ATLAS furnace uses ceramic fiber and rigid firebricks that are extremely resilient and capable of withstanding temperatures well above the working temperature.
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.