



# INDUSTRIAL HEATING EQUIPMENT ASSOCIATION

## IHEA MEMBER PROFILE

# Gasbarre Thermal Processing Systems

**G**asbarre, headquartered in DuBois, Pennsylvania, was founded in 1973 to design, manufacture, and service a complete line of powder compaction and sizing presses for the powder metallurgy industry. Since that time, Gasbarre has earned a worldwide reputation as a full-service supplier to the powder metallurgy, particulate materials, and thermal-processing industries. With 180 employees in five locations, Gasbarre stands alone in the ability to offer equipment and services for all applications related to powder compaction and thermal processing. Today, with 20 percent of Gasbarre products being exported, there are thousands of Gasbarre presses, furnaces, and other equipment in operation all around the globe that service the automotive, aerospace, commercial heat treating, energy, industrial equipment, lawn and garden, military, and medical industries.

Through the acquisitions of Sinterite (1989), C. I. Hayes (2003), and J. L. Becker (2011), Gasbarre Thermal Processing Systems now operates in three locations and offers a broad range of products including air, atmosphere, and vacuum-furnace equipment; associated auxiliary equipment; and never-ending aftermarket support.

Gasbarre is dedicated to serving its customers by providing products and services that combine value and design flexibility through knowledge and understanding of their process. For each piece of equipment, Gasbarre takes a 360-degree approach. From sales and applications engineering to equipment design, manufacturing, commissioning, and never-ending aftermarket support, the company's team of engineers, metallurgists, and technicians understand their process from all angles. Gasbarre's technical capability and commitment to service will ensure its customers' success today and into the future.

### PRODUCTS MANUFACTURED/SERVICES PROVIDED

Gasbarre has a broad range of products and core competencies in multiple areas. Gasbarre's continuous atmosphere line includes mesh belt furnaces for annealing, brazing, and sintering. The continuous atmosphere line also includes pusher furnaces for applications requiring processing above 2,050°F (1,120°C). The flexible batch atmosphere product line includes integral quench furnaces with associated companion equipment, large box, car bottom and tip-up



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### GASBARRE THERMAL PROCESSING SYSTEMS

- » **Main location:** 310 State St.; St. Marys, Pennsylvania, 15857.
- » **Offices:** Livonia, Michigan, and Cranston, Rhode Island.
- » **Phone:** 814-834-2200.
- » **Web:** [www.gasbarre.com](http://www.gasbarre.com)

furnaces, and top-of-the-line nitriding and ferritic nitrocarburizing systems. Finally, Gasbarre's line of modular vacuum furnaces offers the ultimate versatility for low- to high-volume production. The modular design allows for efficient processing for a wide range of thermal processes. All equipment can be designed to meet the strictest of standards such as AMS 2750 and CQI-9 requirements.

Gasbarre also provides a full range of aftermarket services. This includes replacement parts, alloy and custom fabrications, rebuilds, and upgrades. Gasbarre is ISO 17025 certified and has technicians available to perform calibrations, maintenance, equipment moves, troubleshooting, and equipment evaluations.

Gasbarre designs and manufactures a wide range of continuous atmosphere products that include mesh belt and pusher furnaces. The company's product line covers a wide range of different processes including sintering, brazing, annealing, glass-to-metal sealing, inert atmosphere processing, normalizing, stress relieving, tempering, and drying. These products are energy efficient and can be gas-fired

or electrically heated. Gasbarre can provide the ideal product to process specific parts based upon a customer's process, temperature, atmosphere, and throughput requirements.

Gasbarre's multi-chamber vacuum furnaces are designed for a wide range of thermal processing applications. Gasbarre's design allows for faster floor-to-floor times, superior material properties, energy efficiency, and elevated temperatures, all while being environmentally friendly. Systems can be configured for both batch and continuous processing and can use both oil and gas quenching.

Gasbarre Thermal Processing Systems' precision gas nitriding and ferritic nitrocarburizing furnace uses the latest in controls technology for automatic  $K_N$  and  $K_C$  control to AMS 2759/10 & 2759/12 specifications. The furnace is designed to meet AMS 2750 Furnace Class 2 requirements, which allows it to be used to perform nitrogen tempering and stress-relieving processes. For cycle-time improvements and consistent process control, the furnace is equipped with a vacuum pump for purging, is capable of pre- and post-oxidation, and incorporates accelerated air and atmosphere cooling systems. This product delivers top-of-the-line control, repeatability, and quality on every cycle. Gasbarre Thermal Processing Systems is proud to say this complete system is engineered, manufactured, and serviced out of its U.S. locations solidifying the company's position as a leader in equipment for the nitriding and FNC process.

Gasbarre's continuous flow vacuum furnace systems take vacuum processing, energy efficiency, and furnace performance to a new level. The unique continuous vacuum furnace system offers many advantages over batch vacuum furnaces and conventional atmosphere furnace systems. Gasbarre discusses this in terms of the four Es:

»Effects on material properties due to the pure environment of the furnace.

»Energy efficiency due to its ability to be turned on and off when not in use, limited furnace conditioning, and focused heating system.

»Environmentally friendly as there are little-to-no emissions, either zero or more efficient atmosphere consumption, and no atmosphere burn-off requirements.

»Elevated temperatures can be achieved supporting more process flexibility and improved cycle times.

## THE PEOPLE AT GASBARRE

At Gasbarre, it all starts with the people. One of the company's core operating principles is ensuring the staff is motivated, professional, and has a high level of technical expertise. Gasbarre works to ensure it has personnel who have been in the customers' shoes and have dealt with the same challenges. This allows Gasbarre to understand the customers' needs and supply effective solutions.

Through a strategy of acquisition, Gasbarre has built a unique and diverse product offering, all while ensuring it maintains core competencies in each product line. It's not a "one size fits all" supplier. With offerings of batch or continuous equipment and both atmosphere and vacuum technologies, the company can go into each situation objectively and offer the best solution for each customer's need.

Gasbarre has taken a two-fold approach over the last couple years. First, there has been the evolution of its Thermal Processing Systems' organization to improve efficiencies and ultimate service to customers. Gasbarre has consolidated manufacturing into a



single location in St. Marys, Pennsylvania. It has restructured the responsibilities of key leadership to drive market growth and develop new technologies, and increased the capacity and capability of its field service department. Second, the company developed Gasbarre Automation Solutions that is now a division of Gasbarre that offers automation and robotic systems for press and furnace and other processes such as quality and inspection. These changes are not only positioning the company to be better for customers today, but into the future as well.

Speaking of the future, expect to see details from Gasbarre about expansion of its manufacturing facility in Pennsylvania; the

completion and growth of its technical center in Livonia, Michigan; and additional advancements in its product offering and automation packages. While Gasbarre doesn't have immediate acquisition plans, the company does keep its ears open for opportunities that fit its strategy and can grow the business. Gasbarre is certainly excited about the position it has put itself in and the opportunities it has.

In the end, what drives Gasbarre is supporting its customers in their initiatives as they grow and business conditions change. Gasbarre will continue to evolve to ensure it is supplying the latest and best solutions to its customers.

## IHEA 2022 CALENDAR OF EVENTS

**JUNE 15-16**

### Process Heating & Cooling Show

The inaugural show will focus on industrial heating and cooling processes. This event will bring together numerous industries in the process industries including oil & gas, electronics, pharmaceuticals, food, beverages, packaging and plastics, to name a few.

Donald E. Stephens Convention Center | Rosemont, Illinois

**JUNE 28-30**

### Electrification 2022 International Conference & Exposition

This event will bring together the most diverse group yet of innovators, decision makers and stakeholders in the electrification of vehicles, buildings and industry. Keep at the forefront of our decarbonizing society with immersive pre-conference workshops, executive-level plenary sessions, content-rich breakout sessions in multiple tracks and an exhibit hall showcasing the latest technology.

Charlotte Convention Center | Charlotte, North Carolina

**For details on IHEA events, go to [www.ihea.org/events](http://www.ihea.org/events)**

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