innovative Heating

For Hardening, Annealing, Forging, Brazing, Bonding, Soldering, Heat Staking, Pre-Heating and other Applications
Proven Capabilities

GH Induction Atmospheres (GH IA) is a leading American provider of customized industrial heating solutions for automotive, aerospace, medical and energy production applications. We are an experienced industrial heating system integrator working solely with induction-based technology. We design and manufacture customized, turnkey induction heating systems for industrial brazing, welding, heat treating, hardening and general purpose heating.

The Worldwide GH Group
GH Induction Atmospheres is part of the worldwide GH Group. GH Group is one of the largest most experienced induction heating companies in the world with headquarters based in Valencia, Spain, and affiliated Companies in Germany, France, Mexico, Brazil, Argentina, India and China.

GH has over 4000 installations in more than 50 countries serving some of the most discriminating customers for induction heating and heat treating. These include companies like GM, GKN, Delphi, Dana, Arvin Meritor, Bodycote, Bosch, John Deere, Magna, TRW, Mahle, Eaton and others.

GH Group’s continuous collaboration with Customers, Universities, Institutes, Technological Research Centers, national and international Associations and Organizations guarantees the incorporation of the latest technology.

Efficiency and Profitability for Your Company
Working with GH Group is more than just having a supplier of induction heating machines. It is a solid, reliable company, with more than 50 years international know how, innovation, expertise and pioneering in induction technology. GH Group offers its customers everything needed to make their business more profitable and their investments more secure.

Flexibility
GH Group offers to its customers a complete complement of induction heating power supplies covering the widest frequency and power range on the market and a large team of specialists in applications and engineering that allows the design of systems in accordance with each customer’s requirements.

Control
GH Group offers a total control of the heating process, the operation and the maintenance of the system. The development of software for system monitoring and application tracking, the local and/or remote communications and the modular design of the systems are among the characteristics which allow this control.

Clean, Green Technology
The ecological objective of GH Group is to be consistent with the nature of the induction technique: a clean process that takes better advantage of resources and that does not contaminate. GH Group is an organization conscious of the reduction of environmental impact.
Customized Solutions

At GH Induction Atmospheres, we custom design and build turnkey machines based on your part and process requirements. Designed for lean, continuous flow manufacturing, our machines will bring advanced heating technology directly to your factory floor or work cell. Our solutions are designed to meet your specific needs.

Testing
The efficiency of an induction heating machine for a specific application depends on the characteristics of the part itself, the inductor design, the power supply’s capacity and the degree of temperature change required. GH IA’s engineering staff has the experience to take your part and design a machine around it, determining the optimum inductor design, capacitor configuration and power supply for effective, consistent heating.

The first step of our product development process is to determine how induction heating can be integrated into your manufacturing process. In our Application Lab, we’ll evaluate your part samples and determine the best heating approach. Our in-house Metallurgical Laboratory reduces our process development and machine testing time for hardening and brazing applications. Capabilities include sectioning, metallurgical mounting, polishing, etching and metallographic examination.

Engineering
The process of designing the mechanics to support the induction heating machine along with the fixturing to move the customer’s parts in and out of the heating zone requires an experienced, innovative engineering team. Quite simply, IA’s mechanical engineering staff knows how to move parts, and consistently designs innovative, cost-effective machines which meet and frequently exceed our customer’s process requirements.

Manufacturing
As machine development proceeds to the manufacturing stage, periodic customer design reviews ensure that there are no surprises. Internal reviews – our entire group of mechanical/electrical engineers regularly meet to review each other’s work – ensure that the evolving system design will have the benefit of the entire team’s experience and input.

Our in-house machine shop is equipped to supply a majority of the machined components for our machines. Having this capability reduces lead time and cost, and ensures a higher quality product.

So if you’re searching for an experienced integrator to design and build a turnkey manufacturing machine from top quality components...if your lean manufacturing initiatives dictate the replacement of outdated, energy-inefficient production equipment...if your production requirements demand higher yields with reduced downtime...then call us today at 585.368.2120 to arrange a complimentary evaluation of your parts and process requirements!

Advantages of Induction Heating
Why choose induction heating over radiant convection, open flame or another method?

OPTIMIZED CONSISTENCY - a repeatable, consistent heat pattern with precise temperature control

MAXIMIZED PRODUCTIVITY - virtually instantaneous startup, without ramp up or cool down time

IMPROVED PRODUCT QUALITY - the part being heated never touches a flame or other heating element, minimizing warpage, distortion & reject rates

EXTENDED FIXTURE LIFE - precise heat control maximizes life of the surrounding mechanical setup

ENVIRONMENTALLY SOUND - a clean non-polluting process; requires no fossil fuels

REDUCED ENERGY CONSUMPTION - up to 90% energy-efficient, no warm up or cool down required

NEW! 10/20 kW RF Power Supplies
With 10 or 20 kW of output power over a wide 50 to 150 kHz operating frequency range, our new 10/100 and 20/100 induction heating power supplies are ideal for applications such as brazing, shrink fitting, annealing, curing and tempering.

Manufactured and Serviced in the USA
GH Induction Atmospheres is part of the worldwide GH Group, one of the largest and most experienced suppliers of innovative heating solutions for industrial manufacturing applications.