

AN ISO 9001:2015 COMPANY



INDUCTION PRE-HEATING MACHINE



GROW CONTROL Induction Heating is used in industries for Pre-Heating primarily for Pre and Post welding in power sector, boiler tube, pipe industries, automotive sector and General Industry. In many cases, our preheating solutions are integrated into production lines.

In Induction heating, heat transfer is direct into the job there by minimizing heat loss and energy consumption while increasing the production rate and improve quality.

Feedback temperature control is possible for precise temperature control and long duration stress relieving cycle times. This makes it possible to reduce the temperature when welding and then achieve a lower cooling rate. Less risk of cold cracking and excessive hardening are some of the benefits.

We have provided solutions for several applications up to Mega watt power levels.

Features

- **High-Frequency Induction Heating:** Rapidly heats metal components to the desired temperature with minimal energy loss and superior control over the heating process.
- **Programmable Heating Profiles:** Customizable pre-heating temperatures and times tailored to different materials and specific application requirements, enhancing operational flexibility.
- **Compact and Ergonomic Design:** Designed for easy integration into existing production lines, optimizing space utilization in workshops.
- **Safety Mechanisms:** Integrated over-temperature, over-current, and fault detection systems to ensure safe operation during heating processes.
- **Energy Efficiency:** High efficiency in energy consumption, leading to reduced operational costs and minimal environmental impact.

Key Advantages

1. Indigenous Technology:

Developed and manufactured in India, ensuring compatibility with local industry standards and providing accessible technical support.

2. Versatile Applications:



Suitable for a wide range of pre-heating applications across industries.

3. High Reliability:

Engineered for stable and consistent performance, ensuring reliable pre-heating even under demanding operational conditions.

4. Comprehensive Customization:

GROW CONTROL offers tailored solutions to meet specific pre-heating requirements, ensuring optimal functionality for every application.

Applications

1. Welding Preparation:

Ideal for pre-heating components before welding, reducing the risk of thermal shock and ensuring stronger welds.

2. Metal Fabrication:

Used in metal fabrication processes to improve workability and reduce the likelihood of cracking in hard metals.

3. Casting Processes:

Pre-heating molds or metal components prior to casting to enhance the flow and reduce defects in cast products.

4. Oil and Gas Industry:

Suitable for pre-heating pipes and fittings prior to installation, ensuring integrity and performance under harsh conditions.

Customization Options

GROW CONTROL provides a variety of customization options for the Induction Pre-Heating Machine to accommodate specific application requirements:

- **Custom Power Ratings** to suit specific heating needs
- Enhanced Control Features for specific materials and pre-heating profiles
- Integrated Monitoring Systems for real-time performance feedback
- Modular Configurations for Increased Capacity

• **Communication Interfaces** for enhanced integration with production systems Our engineering team collaborates with clients to deliver tailored solutions that precisely fit their operational needs, ensuring optimal performance and compatibility.



Why Choose GROW CONTROL?

- **Indigenous Expertise**: Tailored to meet Indian industry standards with local support for customization and maintenance.
- **Reliable and Consistent Performance**: Ensures precise and repeatable preheating essential for critical applications.
- Low Maintenance Requirements: Durable design reduces wear and tear, minimizing downtime and maintenance costs.
- **Energy Efficient and Cost-Effective**: Low energy losses lead to cost savings and enhanced operational efficiency.
- **Comprehensive Customer Support**: From initial design consultation to installation and ongoing support, *GROW CONTROL* offers a full range of services.

Certifications

• ISO 9001:2015 – Quality Management Systems

Technical Specification

Model no	GCPT153IPHM	GCPT2003IPHM
Capacity (KW)	15	200
Input Voltage	415V±10%, 3-ph, 50Hz	415V±10%, 3-ph, 50Hz
Input Current (A)	-	180
Rating (KVA)	-	250
HF Induction unit	IGBT based resonant inverter	IGBT based resonant inverter
Temperature range (°C)	600 to 780	600 to 780



OUR CLIENTS



P-5/1/A, Road No. 13, IDA Nacharam, Hyderabad - 500 076, Telangana, India. Ph : +91- 40 -27175591, Fax : +91-40-27175386 gcptpltd@gmail.com I www.growcontrols.in