GROW CONTROL
POWER TECH PVT. LTD.
We Provide Solutions....

AN ISO 9001:2015 COMPANY

SLAB HEATING INDUCTION FURNACE

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GROW CONTROL Induction heating is an efficient method used to uniformly heat metal slabs, such as 70/30 Brass (CuZn30) and 90/10 GM (Copper, Tin) alloys, prior to hot rolling. This process ensures the desired temperature is achieved uniformly across the material, optimizing the rolling process, improving product quality, and reducing energy consumption.

We have successfully developed heating solutions for various heating applications, ensuring reliability, precision, and efficiency. Utilizing indigenous technology, these machines are engineered to meet the demands of metal processing, automotive, aerospace, and electronics sectors, delivering exceptional performance and versatility.

Features

1. **Efficient Energy Use**: Induction heating provides faster and more energy-efficient heating compared to traditional methods.

2. **Precise Temperature Control**: Ensures uniform heating across the slab, preventing overheating or under heating.

3. **Fast Heating Cycle**: Significantly reduces preheating time, improving overall productivity.

4. **Homogeneous Heating**: Ensures consistent metallurgical properties across the slab, improving quality during hot rolling.

5. **Higher Throughput**: Faster heating times lead to increased production rates and better overall process efficiency.

6. Advanced Cooling Systems

Key Advantages

1. **Indigenous Technology:**
   Completely designed and manufactured in India, Slab Hating deliver solutions optimized for domestic industrial, research, and defense needs.
2. **Precision and Stability:**

The power supplies deliver precise voltage and current with low ripple and noise, essential for high-accuracy applications like battery testing, electroplating, and electrochemical processing.

3. **Advanced Protection:**
   Built-in safety mechanisms, including over-voltage, over-current, and thermal protection, ensure reliable performance in demanding applications.
4. **Customizable Configurations:**
   GROW CONTROL offers flexible options in terms of voltage, current range, and form factor, ensuring that each unit meets the unique requirements of its intended application.

Applications

- Metal Preheating Before Extrusion or Forging.
- Heat Treatment for Metal Slabs
- Hot Rolling Process
- Metal Expansion

Customization Options

GROW CONTROL offers a range of customization options to meet the unique power requirements of diverse industrial and defense applications:

- **Output Voltage & Current Range Adjustments**
- **Cooling System Customization**
- **Advanced Monitoring and Control Interfaces**
- **Extended Protection Features**
- **Retrofitting into an existing production line.**

Our engineering team collaborates with clients to deliver tailored solutions suited to their operational, environmental, and performance needs.

Why Choose *GROW CONTROL*?

- **Indigenous Design**: Backed by over three decades of power electronics expertise, ***GROW CONTROL*** Slab heating meet high standards of reliability and performance.
- **Efficiency & Stability**: High efficiency and low ripple output ensure stable power delivery, critical for sensitive and precision applications in industrial, defense, and research sectors.

- **Safety and Reliability**: Designed with comprehensive protection mechanisms, these power supplies offer safe and dependable performance under demanding conditions.
- **Ruggedized for Harsh Environments**: Compliant with military standards, ***GROW CONTROL*** Induction Furnace are built to operate reliably in extreme environmental conditions.
- **Customer Support**: From customization and installation to support and maintenance, ***GROW CONTROL*** ensures seamless integration and optimal performance for all clients.

Technical Specification

Model no	GC1504SIHM
Power Supply	415V±10%, 50Hz, 3 wire system
Power of Heating Conductor	900kW
Max. Inductor length	600mm
Inductor change over time	4hrs
Installed Power	1500kVA
Power Factor	0.9(lag)
Controlling	PID Linear Mode of Control
Slab Details	
Heated Material	(70/30) Brass
Cooling Method	Water Cooled
Actuation	Hydraulic
Temperature Controller	Pyrometer
Max Temperature Requirement	1000°C
Production rate/Hour	40 Slabs/Hr
Temperature Range	4°C to 50°C
Humidity	100%

OUR CLIENTS

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