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

AN ISO 9001:2015 COMPANY


# INDUCTION PARTIAL BILLET HEATING

***GROW CONTROL*** is a research-based power electronics organization that blends technology, innovation, and engineering to transform concepts into world class products and solutions.

***GROW CONTROL*** Induction Partial billet heating is a specialized metalworking component designed for efficient heating and processing in induction heating applications. Crafted from high-quality materials, this billet features a precise geometry that facilitates uniform heating, contributing to improved work piece properties during subsequent machining or forging processes.

With 30+ years of expertise and a commitment to indigenous technology, ***GROW CONTROL*** delivers rugged, reliable, and customizable power supply systems built to meet the stringent requirements of Indian industries, defense, and research sectors.

## Features

- **Induction Heating Principle:** When an alternating current flows through a coil, it creates a changing magnetic field. This field induces electric currents (also known as eddy currents) in the metal billet, generating heat due to the resistance of the material.
- **Efficiency:** Induction heating is highly efficient, as the heat is generated directly within the material rather than from an external source. This results in faster heating times and reduced energy consumption.
- **Uniform Heating:** The process can be tailored to achieve uniform heating throughout the billet, minimizing temperature gradients and ensuring consistent material properties.
- **Control and Versatility:** Induction heating systems allow for precise control of heat input and temperature, adapting to different shapes, sizes, and materials, which is essential for various applications in metalworking.

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## Applications:

Induction Partial billet heating is widely used in the steel and aluminum industries, particularly for preparing billets for processes like forging, rolling, and extrusion, where proper temperature is critical to achieving desired material characteristics.

## Key Advantages

1. **Indigenous Technology:**
   Completely designed and manufactured in India, ***GROW CONTROL*** Billet Heating deliver solutions optimized for domestic industrial, research, and defense needs.
2. **Advanced Protection:**
   Built-in safety mechanisms, including over-voltage, over-current, and thermal protection, ensure reliable performance in demanding applications.
3. **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.

## 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**

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

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## Why Choose *GROW CONTROL*?

- **Indigenous Design**: Backed by over three decades of power electronics expertise, ***GROW CONTROL*** PARTIAL BILLET 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*** PARTIAL BILLET 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.

## Certifications

- **ISO 9001:2015** – Quality Management Systems

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## Technical Specification

| Model no. | GC150KVASR | GC160KVASR |
|---|---|---|
| Capacity (KW) | 100 | 160 |
| Frequency (kHz) | 400-1000kHz | 400-1000kHz |
| Input power supply | 415+5%-10%, 3 ph, 50 Hz | 415+5%-10%, 3 ph, 50 Hz |


## OUR CLIENTS

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