

We Provide Solutions....

## AN ISO 9001:2015 COMPANY



**INDUCTION 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 billet heating is a process commonly used in metallurgy to heat metal billets uniformly before further processing, such as forging, rolling, or extrusion. This method utilizes electromagnetic induction, which generates heat through the resistance of the material to an alternating magnetic field.

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**

- **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 metal working.

#### Applications:

Induction 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.

## Why Choose GROW CONTROL?

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



# **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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