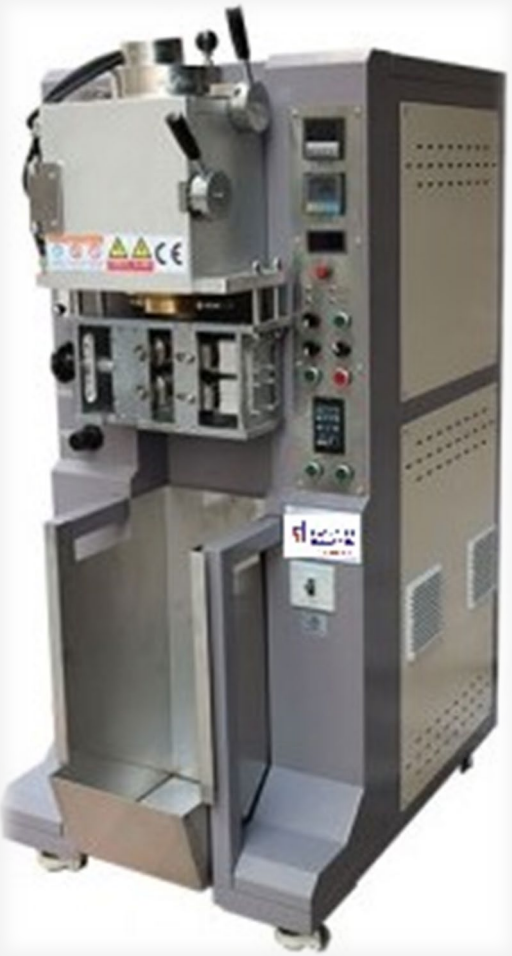
GROW CONTROL
POWER TECH PVT. LTD.
We Provide Solutions....

AN ISO 9001:2015 COMPANY



INDUCTION CONTINUOUS CASTING MACHINE

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 Continuous Casting Machine (CCM) is an advanced metallurgical system designed for the continuous casting of high-quality metal products. Utilizing induction heating technology, the ICCM efficiently melts and casts various alloys, including steel, aluminum, and copper, ensuring superior metallurgical properties and reduced production costs.

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: Provides precise temperature control and energy efficiency, resulting in uniform melting and minimized oxidation.
Continuous Casting Process: Facilitates ongoing production with minimal interruptions, enhancing throughput and productivity.
Advanced Control Systems: Equipped with state-of-the-art automation and monitoring capabilities for real-time process adjustments and quality assurance.
Versatile Casting Options: Capable of producing a wide range of shapes and sizes tailored to specific application needs.
Compact Design: Optimized layout for reduced footprint, allowing easier integration into existing production lines.

Key Advantages

1. **Indigenous Technology:**
   Completely designed and manufactured in India, *GROW CONTROL* CCM 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.

Applications

1. General manufacturing
2. Production of high-purity materials for specialized applications.

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 (Air or Liquid)**
- **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* CCM 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* CCM 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.

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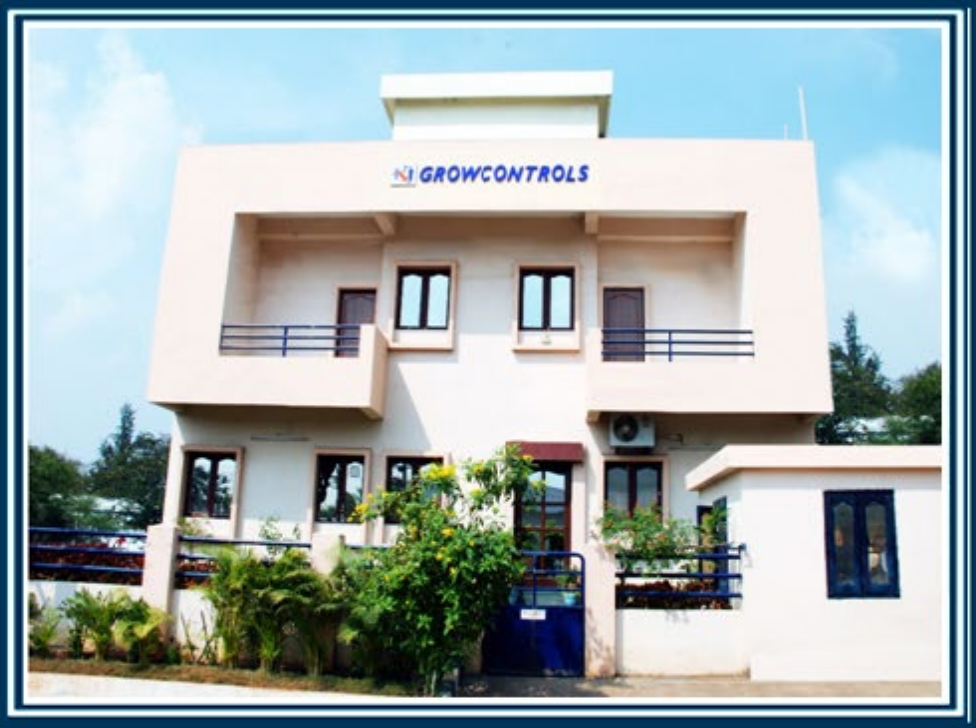
Certifications

- **EN 55022** – EMI Compliance
- **ISO 9001:2015** – Quality Management Systems

Technical Specification

Model no.	GC10KWICCM
Type of Continuous Casting Machine	Vertical Continuous Casting Machine (Minimum 07Kg/hr pure Gold and 12 kg/hr pure silver bar output).
Ambient Temperature	<40-degree C.
Metals to be cast	Pure Gold, Gold Alloy, Carat Gold. Pure Silver, Silver Alloy, Multi Alloy (Silver, Copper, Zinc and Nickel).
Profile of cast bar	Flat Rectangular Bar and Round wire
Operation	Continuous casting under inert gas (Nitrogen) and (or) vacuum. Gas wash (electronic system) to achieve absolute inertness.
Dimensions of output cast bar	• Bar Width: 25 to 75mm; Thickness: 8 to 12 mm. • Wire Dia.: 4 mm to 10mm
Induction Generator	Microprocessor controlled indirect induction heating system.
Induction Frequency	Low frequency induction generation 3.5 KHz to 6.5 KHz
Crucible Volume	Minimum 1400 CCM
Facility of Feeding Chute	An arrangement of feed chute must be available for addition of different metals for alloys bar casting.
Extraction Speed	Programmable (Machine programmable draw length min. 1.0 mm to 25.0mm OR more and with draw force indication).
Drawing Unit	Minimum 04 Driven rolls with good traction.
Solidification Process	• Die cooler with provision for auto controlling the die temperature, the die cooler water temperature and the die cooler water flow. • Secondary water-cooling system shall be provided.
Cast bar cutter / shearing cutter	Hydraulic cutter with fixing stand having appropriate tonnage for shearing output bar.
Vacuum Pump	To create Vacuum pressure less than 50 millibar.
Temperature Controller	Dual temp controller with fuzzy logic or better to control temperature up-to 1500 degree Celsius with indication



OUR CLIENTS

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