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

AN ISO 9001:2015 COMPANY

INDUCTION HARDENING 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 Hardening Machine** is an advanced solution designed for the effective hardening of metal components through high-frequency induction heating. Utilizing indigenous technology, this machine provides precise control over the heating and cooling processes, resulting in improved hardness and durability of the treated materials. The induction hardening process is efficient, environmentally friendly, and ideal for high-volume production environments.

GROW CONTROL **Induction Hardening Machine** offers a high-performance solution for various hardening applications, ensuring reliability, precision, and efficiency. Utilizing **indigenous technology**, these machines are engineered to meet the demands of automotive, aerospace, and manufacturing sectors, delivering exceptional performance and versatility

Features

- Solid State IGBT / MOSFET based design
- Resonant inverter controlled by feedback control ensures stable output power
- Highly efficient and reliable systems

Key Advantages

1. **Indigenous Technology:**
   Developed and manufactured in India, ensuring compatibility with local industry standards and accessible technical support.
2. **Versatile Applications:**
   Suitable for a wide range of hardening applications across various industries.
3. **High Reliability:**
   Engineered for stability and accuracy, ensuring consistent performance even under demanding operational conditions.
4. **Comprehensive Customization:**

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

Applications

1. **Tool Manufacturing:**
   Effective in hardening cutting tools and industrial machinery components for improved longevity and performance.
2. **Metal Processing:**
   Suitable for treating various metal parts to achieve the desired hardness and mechanical properties.
3. **Heavy Machinery:**
   Ensures the strength and durability of components used in heavy machinery applications.

Customization Options

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

- **Custom Power Ratings** to suit specific hardening needs
- **Enhanced Control Features** for specific materials and hardening 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 hardening 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	GC253IHRDM	GC403IHRDM	GC503IHRDM	GC753IHRDM	GC1003IHRDM	GC1203IHRDM
Input Voltage	415V±10%, 3-Ph, 50Hz					
Output (KW)	25	40	50	75	100	120
Scheme	MOSFET	IGBT	IGBT	IGBT	IGBT	IGBT
Frequency (kHz)	180 to 450	20 to 200	50 to 200	40	50	10
Input Power Factor	0.9					
Output Power Factor	Near unity with PLL frequency tuning					
Power Control	Manual & Auto					

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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 | www.growcontrols.in