

## 90% Energy Efficient Electric Induction Melting Furnace with Water Cooling and PLC Control for Foundry Industries

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: Huarui
- Certification: Patent ; national testing report; quality management system certificate
- Model Number: medium frequency
- Minimum Order Quantity: 1
- Price: to be negotiated
- Packaging Details: waterproof ; secure ; vibration proof
- Delivery Time: 20~45 days
- Payment Terms: T/T; L/C
- Supply Ability: 10000 sets/ year



### Product Specification

- Energy Efficiency: 90%
- Operating Voltage: 380V
- Control System: PLC
- Safety: High
- Cooling Method: Water Cooling
- Safety Features: Overheat Protection
- Advantage: Energy Saving
- Melting Speed: 1-5 Minutes
- Highlight: **90% Energy Efficiency Induction Melting System**  
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**Water Cooling Electric Induction Melting Furnace**  
, **PLC Control Melting Furnace System**

### Product Description:

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The Induction Melting System is an advanced electric induction melting furnace designed to meet the demanding needs of modern metallurgical processes. With a capacity of 0.5 tons, this electric induction melting furnace provides efficient and reliable melting for a wide range of metals and alloys. It is engineered to deliver exceptional energy efficiency, boasting an impressive 90% energy utilization rate, which ensures reduced operational costs and a lower environmental footprint compared to traditional melting methods.

One of the standout features of this electric induction melting furnace is its water cooling system. The furnace employs a robust water cooling method to maintain optimal operating temperatures and safeguard the internal components from overheating. This system requires a cooling water flow rate of 5-10 liters per minute, which is carefully calibrated to provide effective thermal management while conserving water resources. The precise control of the cooling water flow enhances the furnace's overall performance and longevity, making it a dependable choice for continuous industrial use.

Safety is a paramount consideration in the design of this induction melting system. The electric induction melting furnace incorporates multiple safety mechanisms to protect operators and equipment. High safety standards are maintained through features such as automatic shut-off systems, overheating protection, and secure enclosure designs that minimize the risk of accidents during operation. These safety measures not only ensure compliance with industry regulations but also provide peace of mind for users operating in high-temperature environments.

In addition to its technical specifications, the electric induction melting furnace offers ease of use and versatility. The 0.5-ton capacity makes it suitable for small to medium-scale production, allowing manufacturers to melt a variety of metals with precision and consistency. Its electric induction technology provides rapid heating and uniform temperature distribution, resulting in high-quality melts with minimal impurities. This makes the furnace ideal for applications in foundries, metal recycling, and alloy production.

The system's energy efficiency is a critical advantage in today's energy-conscious industrial landscape. By achieving a 90% energy efficiency rate, the electric induction melting furnace significantly reduces electricity consumption compared to conventional fossil fuel-based furnaces. This not only lowers operational costs but also contributes to sustainable manufacturing practices by decreasing carbon emissions. The efficient use of energy makes this furnace an economically and environmentally responsible choice for industries focused on reducing their ecological impact.

Moreover, the integration of water cooling with a controlled flow of 5-10L/min ensures that the furnace operates within safe temperature limits while maximizing thermal efficiency. This cooling method prevents thermal stress and extends the lifespan of the furnace components, reducing maintenance needs and downtime. The combination of high energy efficiency and effective cooling makes this electric induction melting furnace a technologically advanced solution for modern melting applications.

In summary, the Induction Melting System is a high-performance electric induction melting furnace that excels in energy efficiency, safety, and operational reliability. Its 0.5-ton capacity is ideal for diverse melting requirements, while the water cooling system with a 5-10L/min flow rate ensures optimal temperature control. Prioritizing safety with robust protective features, this electric induction melting furnace is a trusted choice for industries seeking a cost-effective, environmentally friendly, and safe melting solution. Whether for foundries, metal processing, or alloy manufacturing, this induction melting system delivers superior performance and consistent results.

### Applications:

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The Huarui Induction Melting System, model number medium frequency, is a state-of-the-art melting furnace system designed for a variety of industrial and manufacturing applications. Originating from China, this system boasts multiple certifications, including a patent, national testing report, and a quality management system certificate, ensuring its reliability and high performance. The melting chamber, made from durable ceramic material, provides excellent heat resistance and longevity, making it ideal for continuous use in demanding environments.

This melting furnace system is perfect for industries such as metal casting, foundry operations, and alloy production where precise and efficient melting processes are critical. The system's electric power supply and medium frequency technology enable rapid heating and melting, improving productivity and energy efficiency. With a cooling water flow rate of 5-10L/min, the system maintains optimal operating temperatures, preventing overheating and ensuring consistent performance. The built-in overheat protection adds an extra layer of safety, safeguarding both the equipment and operators during prolonged use.

The Induction Melting System features an advanced PLC control system that allows for precise control and automation of the melting process, enhancing accuracy and reducing human error. This makes it suitable for both small-scale workshops and large industrial production lines. The product's packaging is designed to be waterproof, secure, and vibration-proof, guaranteeing safe delivery and installation.

Huarui offers this melting furnace system with a minimum order quantity of just one set, making it accessible for businesses of all sizes. The supply ability of 10,000 sets per year ensures availability and timely delivery within 20 to 45 days, depending on order specifications. Payment terms include T/T and L/C, providing flexible options for international buyers. Price negotiations are welcomed, allowing customers to find the best deal based on their requirements.

In summary, the Huarui Induction Melting System is a highly efficient, safe, and reliable melting furnace solution. Its combination of ceramic melting chamber, overheat protection, PLC control, and robust construction makes it an excellent choice for a wide range of melting applications. Whether used in metal foundries, alloy production, or other industrial melting scenarios, this melting furnace system delivers superior performance and value.

### Customization:

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Huarui offers customized induction melting furnace systems tailored to meet your specific requirements. Our medium frequency melting furnace models are designed with advanced PLC control systems and operate efficiently at 380V electric power supply, ensuring energy-saving performance and rapid melting speeds of 1-5 minutes.

Each melting furnace system is manufactured in China with strict quality standards, backed by patent certification, national testing reports, and a quality management system certificate. We ensure secure, waterproof, and vibration-proof packaging to protect your equipment during delivery.

With a supply ability of 10,000 sets per year and a minimum order quantity of just one unit, we provide flexible options to suit your production needs. Delivery time ranges from 20 to 45 days, and payment terms include T/T and L/C, with prices available upon negotiation.

Choose Huarui's medium frequency melting furnace system for reliable, efficient, and customizable solutions in induction melting furnace

technology.

## Support and Services:

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Our Induction Melting System is designed to provide efficient and precise melting solutions for a variety of metals and alloys. To ensure optimal performance and longevity of your equipment, we offer comprehensive technical support and services.

Technical support includes installation guidance, operational training, troubleshooting assistance, and routine maintenance advice. Our team of experts is available to help you understand the system's features, optimize melting processes, and resolve any technical issues promptly.

We also provide regular software updates and system diagnostics to enhance the functionality and safety of your induction melting system. Preventive maintenance services can be scheduled to minimize downtime and extend the lifespan of your equipment. Customized service plans are available to meet the specific needs of your operation, including on-site support and emergency repair services. Our commitment is to ensure that your induction melting system operates at peak efficiency and delivers consistent, high-quality results.

For detailed manuals, troubleshooting guides, and additional resources, please refer to the product documentation provided with your system.

## Packing and Shipping:

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### Product Packaging and Shipping for Induction Melting System

The Induction Melting System is carefully packaged to ensure safe delivery and protection during transit. The system is first wrapped in anti-static and shock-absorbent materials to prevent any damage from vibrations or impacts.

All components, including the induction coil, power supply, control unit, and accessories, are securely placed in custom foam inserts within sturdy, reinforced wooden crates. These crates are designed to withstand rough handling and environmental factors during shipping.

Additionally, desiccant packets are included inside the packaging to protect the system from moisture and corrosion. Clear labeling and handling instructions are affixed to the crates to guide the logistics team.

For international shipments, the packaging complies with ISPM 15 standards to ensure smooth customs clearance. The Induction Melting System can be shipped via air freight, sea freight, or road transport depending on customer requirements and destination.

Before dispatch, each unit undergoes thorough inspection and testing to guarantee functionality upon arrival. Customers receive tracking information and estimated delivery schedules for their convenience.

## FAQ:

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### Q1: What is the brand and model of the Induction Melting System?

A1: The Induction Melting System is manufactured by Huarui and the model number is medium frequency.

### Q2: Where is the Induction Melting System produced?

A2: This product is made in China.

### Q3: What certifications does the Induction Melting System have?

A3: The system holds a patent, a national testing report, and a quality management system certificate.

### Q4: What is the minimum order quantity and how is the price determined?

A4: The minimum order quantity is 1 unit, and the price is negotiable based on order details.

### Q5: How is the product packaged and what are the delivery and payment terms?

A5: The product is packaged to be waterproof, secure, and vibration proof. Delivery time ranges from 20 to 45 days. Payment terms accepted are T/T and L/C.

### Q6: What is the annual supply capacity for the Induction Melting System?

A6: The supply ability is 10,000 sets per year.



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