

洛阳安晶智能装备有限公司
Luoyang Anjing Intelligent Equipment Co., Ltd.



新一代
智能中频炉

New Generation Intelligent Medium Frequency Furnace

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ABOUT US —— More Stable, More Energy Efficient

Luoyang Anjing Intelligent Equipment Co., Ltd.

As specialists in the research, development, and manufacturing of industrial thermal equipment, we are deeply engaged in the fields of metal melting and heat treatment. Our main product portfolio encompasses a comprehensive range of thermal processing equipment, including medium frequency melting furnaces, medium frequency forging heating furnaces, vacuum melting furnaces, and industrial resistance furnaces.

We are a one-stop supplier integrating R&D, manufacturing, sales, and technical service, backed by a complete and robust product series. Guided by the philosophy of "Innovation-Driven, Quality First," we are dedicated to providing advanced heat treatment equipment solutions for industries such as metalworking, machinery manufacturing, forging and casting, metallurgy, and rolling.

CONTINUOUS INNOVATION:

Adhering to rigorous quality control, our energy-efficient, remote-controlled medium frequency furnaces deliver exceptional reliability and rapid iron melting. With power consumption below 500kWh per ton of iron, they significantly reduce energy usage while meeting high-performance demands. Our product range includes Medium Frequency Melting Furnaces for precise, energy-saving metal melting, and Vacuum Melting Furnaces for oxygen-free processing to ensure superior material purity. Every unit undergoes strict quality inspection to guarantee stable and reliable performance in the most demanding industrial environments.



COMPANY PATENTS



OUR ADVANTAGES

COMPACT, EFFICIENT, AND VERSATILE—OUR MEDIUM FREQUENCY FURNACE IS ENGINEERED FOR HIGH-PERFORMANCE MELTING. FEATURING AN ULTRA-COMPACT POWER SUPPLY FOR ENERGY SAVINGS AND UNIFORM HEATING, IT OCCUPIES LESS THAN ONE SQUARE METER AND ALLOWS QUICK CRUCIBLE CHANGES FOR STEEL, IRON, COPPER, AND ALUMINUM. MAGNETIC STIRRING ENSURES PURE, HOMOGENEOUS MELTS. WITH 20–30 MINUTE CYCLES AND 24/7 CONTINUOUS OPERATION CAPABILITY, IT DELIVERS RELIABLE EFFICIENCY WHILE LOWERING OVERALL COSTS.

MF Series – Overview & Applications

Medium Frequency

Overview: Medium frequency products operate at a frequency range of 1–20 kHz with a power range of 15–500 kW. Due to the lower frequency, these products are primarily used in applications requiring deep heating or through heating, such as hot forging of bars, melting of metal materials above 2 kg, thermal fitting, overall tempering of molds, and preheating before welding.








Medium Frequency Power Supply

The equipment features...

Traditional medium frequency parallel r onant structure with simple oad matching, high equipment efficiency, and high utilization rate.



Energy Efficient: Maintains a high power factor and power supply efficiency throughout the full power range. Consumes at least 20% less energy than SCR-based MF furnaces.

Medium Frequency Power Supply: Utilizes IGBT power devices and our company's fourth-generation variable current control technology -- a dual-regulation variable current control technology based on parallel resonance. In this technology, power regulation and frequency conversion are independently controlled. A high-frequency chopper circuit, composed of IGBT switching devices and amorphous inductors, regulates the power output. IGBT parallel resonance technology, together with automatic frequency tracking, achieves precise soft-switching control during the inversion process.

Frequency Range

1KHZ–20KHZ, matched to the size of the workpiece or the required depth of through heating, offering wide adaptability. The equipment is compact and lightweight, with a complete range of models and a wide selection range.

Model	AJ-15	AJ-25	AJ-35	AJ-45	AJ-70	AJ-90	AJ-110	AJ-160	AJ-240	AJ-300
Input Power	15KW	25KW	35KW	45KW	70KW	90KW	110KW	160KW	240KW	300KW
Output Voltage	70-520V									
Input Power Supply	Three-phase 380V, 50 or 60Hz									
Output Oscillation	200Hz~20KHz, subject to customer workpiece heating requirements									
Load Duty Cycle	100%, 24-hour continuous operation capability									



Small-Scale Medium Frequency Induction Heating

Lining Type: Basic (Alkaline)
Operation: Melting
Application: Metals

15kW Medium Frequency Power Supply

Melting Capacity (Steel): 10 kg
Duty Cycle: 100% continuous operation
Output Power: 15 kW





70kW Medium Frequency Power Supply

Smelting Process: Pyrometallurgy
Operation Mode: Melting
Lining Type: Acidic

Medium Frequency Heating Power Supply

Type: Medium Frequency Electric Furnace
Operation Method: Melting
Application: Metals





90kW Medium Frequency Power Supply

Output Voltage: 70–550V
Input Power: 90 kW
Operation: Heating

MF with Integrated Transformer

1KHZ-20KHZ

Built-in step-down transformer for enhanced output voltage safety.



Two Types:
1.Oil-immersed aluminum shell capacitors + Medium frequency transformer (with ferrite core)
2.High-power film capacitors + Medium frequency transformer (with ferrite core) — This type significantly reduces the unit's size and weight, enabling the development of handheld medium frequency heating units.

Applications: Vacuum melting, vacuum welding, and other thermal fitting applications, mold heating, sintering, brazing, crystal growth, etc. Ideal for applications requiring both through heating of large workpieces and safe low-voltage output, with minimal induction coil turns and short coil requirements.



AJ-B-90B/110B/160B

Built-in Step-Down Transformer
Output Power: 15–160 kW
Output Voltage: 70–200 V

AJ-B-15B/25B/35B/45B/70B

Components: Main Unit + Extension Unit + Small Extension Unit + Induction Coil





Handheld Small Extension Head

Technical Parameters: 15–160 kW
with film capacitors
Customizable

Medium Frequency Melting Furnace

Applications

Melting of materials such as steel, stainless steel, copper, aluminum, gold, silver, and more.



Medium Frequency Melting: Provides excellent electromagnetic stirring effect, which promotes uniform temperature and structure of the molten metal, facilitates slag floating, and reduces im

Frequency: Wide range from 1KHZ to 20KHZ. The output frequency can be determined by designing the induction coil and matching compensation capacitors based on factors such as melting capacity, electromagnetic stirring effect, heating efficiency, and operating noise.

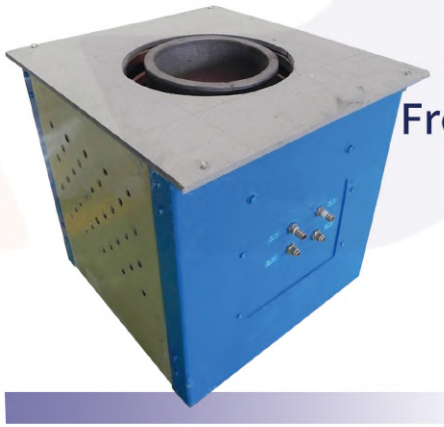
Energy Saving: At least 20% more energy-efficient than SCR medium frequency furnaces.

Equipment: Compact size and lightweight. Melting capacity ranges from a few kilograms to several hundred kilograms, offering a wide selection.

Specifications and Heating:

Maximum heating capacity of each melting furnace: 50–60 minutes per melt for cold furnace starts; 20–30 minutes per melt for hot furnace starts.。

Melting Furnace Model	Melting Steel & Stainless Steel	Melting Copper, Gold & Silver	Melting Aluminum
AJ-15	----	10KG	3KG
AJ-25	5KG	20KG	6KG
AJ-35	10KG	30KG	10KG
AJ-45	18KG	50KG	20KG
AJ-70	25KG	100KG	30KG
AJ-90	40KG	120KG	40KG
AJ-110	50KG	150KG	50KG
AJ-160	100KG	250KG	100KG
AJ-240	150KG	400KG	150KG
AJ-300	200KG	500KG	200KG
AJ-500	300KG	----	300KG



Stationary Medium FrequencyMelting Furnace

Application: Metal Melting Forging
Model: AJ-45kW



Top-Pouring Melting Furnace

Application Scope: Metal Melting
Also Known As: Induction Industrial Furnace
Temperature: 1200 (°C)



Hydraulic Tilting Melting Furnace

Application Scope: Metal Melting
Hydraulic Industrial Furnace

Simple Top-Pouring Melting Furnace

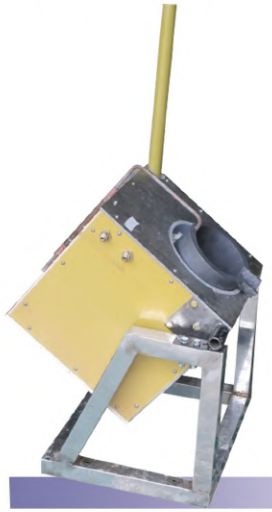
Maximum Input Power: 15–160 kW
Type: Small-Scale Electric Furnace
Melting: Metals



Mechanical Tilting Melting Furnace

Output Voltage Range: 70–520V
Input Power: 15–500kW
Duty Cycle: 100% (Continuous)





Hand Tilting Melting Furnace

Suitable For: Melting capacity below 10 KG
Power Supply: 15–70 kW



Electric Tilting Melting Furnace

Suitable For: 50KG and below
Oscillation Frequency: 2–20KHZ
Tilting: Electric

MF Induction Forging System

Key Feature

Wide frequency range from 1kHz to 20kHz enables frequency optimization according to workpiece diameter.



Batch Loading for Through Heating: The induction coil length ranges from 500mm to 1 meter, allowing multiple billets to be heated simultaneously. This ensures superior through-heating effect as the extended heating zone prmotes uniform temperature distribution.

Continuous Feeding for Stable Power Output: The continuous feeding mode ensures a balanced load within the induction coil. By overcoming the drastic load impedance variation (from room temperature to 1100°C) associated with single-billet heating, the equipment maintains consistent output power. Throughout the continuous heating process, the actual operating power remains above 85% of the rated value, ensuring efficient equipment utilization.

Specifications & Heating Capabilities

Continuous through-heating of regular round bars, profiled materials, or other shaped blanks made of steel, stainless steel, copper, aluminum, etc., with a diameter of 12mm and above.suitable for both overall heating and localized heating of the workpiece.

Model	Heating Steel or Stainless Steel to 1050°C	Heating Copper to 700°C
AJ-35	1.25KG / min	1.75KG / min
AJ-45	1.67KG / min	2.33KG / min
AJ-70	2.5KG / min	3.5KG / min
AJ-90	3.33KG / min	4.67KG / min
AJ-110	4.17KG / min	5.83KG / min
AJ-160	5.83KG / min	------
AJ-240	8.6KG / min	------
AJ-300	11.25KG / min	------
AJ-500	17.9KG / min	------



MF Batch Heating Furnace

Specifications: Batch Heating Equipment: Small to Medium Size



240/300 Forging Furnace

Input Voltage: 380V, 3-Phase
Output Oscillation Frequency: 1-20KHZ



Oval Coil Bar End Heating Furnace

Output Oscillation Frequency: 1-20KHZ
Diameter Range: 10~50mm
Heating Coil: Oval Type

70KW Medium Frequency Forging Furnace

Optional Accessories: Manipulator
Loading & Unloading: Automatic
Footprint: Small



Intermediate Frequency Bar Heater

Workpiece Diameter Range: 10~80mm
Bar Length: 600-1500mm
Heating Coil: Round Type





Infrared-Controlled Induction Heating Furnace

Output Oscillation Frequency: 1-20KHZ
Application: Heating of brass rods
Diameter Range: 10~80mm



Automatic Feeding Bar Heating Machine

Diameter Range: 10~80mm
Output Frequency: 1-20KHZ

High Frequency Induction Heating

A: Integrated Self-Controlled Type B: Split Self-Controlled Type

Features

No open flame, safer; utilizes eddy current to generate electromagnetic induction, heating only metals.



Full Solid-State IGBT Variable Frequency Power Regulation: Utilizing second-generation "Dual-Adjustment Controlled Series Resonant Soft Switching Control" technology to achieve automatic frequency tracking, ensuring high reliability.

100% Duty Cycle: Capable of continuous 24-hour operation at maximum heating power. Features ultra-fast heating speed with constant power and constant current control functions for maximum heating efficiency, optimizing the heating process of metal workpieces.

Frequency Modulation & Tracking: Automatic compensation circuit with digital high-precision power control function, significantly improving heating and welding stability.

Model	AJ-45KW-B	AJ-60KW-B	AJ-90KW-B	AJ-120KW-B	AJ-160KW-B
Input Voltage	Three-phase 380V 50~60Hz				
Output Oscillation Power	45KVA	60KVA	90KVA	120KVA	160KVA
Output Oscillation Frequency	30~80Hz				
Max Input Power	50KVA	66KVA	99KVA	132KVA	176KVA
Cooling Water Pressure & Flow	0.3Mpa ⩾ 0.8L/Min	0.3Mpa ⩾ 0.8L/Min	0.4Mpa ⩾ 0.8L/Min	0.5Mpa ⩾ 12L/Min	0.6Mpa ⩾ 12L/Min
Heating & Holding Current	15-90A	20-120A	30-160A	40-200A	50-330A
Duty Cycle	100% at 30°C ambient				
Net Weight	64kg	81kg	95kg	105kg	135kg
Main Unit Dimensions	550×200×535mm	650×285×510mm	680×370×640mm	680×370×640mm	680×370×640mm
Extension Unit Dimensions	470×265×440mm	510×285×430mm	900×500×600mm	900×500×600mm	900×500×600mm
Cable Connection Length	2-6m				

Key Features

Simple & Reliable: Utilizes Fuji MOSFETs and Siemens EUPEC IGBT power transistors with first-generation "Single-Control Series Resonant Technology."

Adjustable: time for heating and holding processes can be adjusted to improve heating quality and repeatability, simplifying operator tasks and techniques.

Easy Installation: Simply connect to a single-phase 220V or three-phase 380V power supply, and hook up the water inlet and outlet.

Compact Footprint & Safe Operation: Output voltage is below 36V, eliminating the risk of high-voltage electric shock.

Model	AJ4kW-A	AJ-15kW-A	AJ-15kW-B	AJ-25kW-A	AJ-25kW-B	AJ-35kW-B
Input Voltage	Single-phase 220V 50~60Hz			Three-phase 380V 50~60Hz		
Output Oscillation Power	4KVA	15KVA	15KVA	25KVA	25KVA	35KVA
Duty Cycle	80% at 30°C					
Net Weight	20kg	24kg	30kg	29kg	34kg	56kg
Cable Connection Length	2-6m					
Oscillation Frequency	100K~250KHz	30K~80KHz	30K~80KHz	30K~80KHz	30K~80KHz	30K~80KHz



A-15KW High Frequency Induction Heating

Input Voltage: Single-Phase 220V, 50~60HZ
Cable Connection Length: 2-6m



B-90KW High Frequency Induction Heating

Output Oscillation Frequency: 30~80HZ
Input Voltage: Three-Phase 380V
Duty Cycle: 100% at 30°C

A-35KW High Frequency Induction Heating

Application: Heating, Melting, Welding
Process: Pyrometallurgy
Applicable Materials: Iron



B-25KW High Frequency Induction Heating

Oscillation Frequency: 30K~80KHZ
Cable Connection Length: 2-6m





A-20KW High Frequency Induction Heating

Application: Heating, Welding
Drive Type: Electric
Current: AC



B-35KW High Frequency Induction Heating

Input Voltage: Three-Phase 380V
Duty Cycle: 100% at 30°C

Advanced UHF Induction Technology

Features

Compact Size, Light Weight, Simple Operation, Easy Installation



Latest Fourth-Generation Inverter Technology:"High-Speed Dual-Adjustment Fully Resonant Soft Switching Control Technology" with automatic frequency tracking and capture.

Frequency:100KHZ~2.0MHZ, enabling effective control of workpiece surface hardened layer depth. 100% duty cycle allows for 24-hour continuous uninterrupted operation.

Each Model: Available in integrated or split type, with automatic time control function.

Model	AJ-10kW	AJ-20kW	AJ-30kW	AJ-40kW	AJ-60kW	AJ-100kW
Input Voltage	Three-phase 380V 50~60Hz					
Input Power	10kW	20kW	30kW	40kW	60kW	100kW
Oscillation Frequency	50-300kHz	50-250kHz	50-200kHz	50-200kHz	30-150kHz	30-100kHz
Output Current	3-15A	5-30A	7-45A	10-60A	12-90A	20-145A
Net Weight	28kg	53kg	53kg	77kg	77kg	120kg
Main Unit Dimensions	570×300×500mm	590×300×530mm	590×300×530mm	680×370×640mm	680×370×640mm	760×500×880mm
Extension Unit Dimensions	520×260×500mm	520×255×380mm	520×255×380mm	530×330×480mm	530×330×480mm	760×500×600mm

Key Features

Stable Quality: Compact size, as small as a fax machine.Heating & Welding Minimum diameter 0.1mm

Quenching & Welding: For workpiece areas between 0.1~1.0cm with minimal allowable deformation and requiring ultra-fast quenching and welding, this machine delivers optimal results. Utilizes dedicated microcomputer software for automatic frequency tracking and fault self-diagnosis function.

Model	AJ-3.2kW	AJ-4.5kW	AJ-6.0kW-1	AJ-6.0kW-2	AJ-6.0kW-3
Input Voltage	Single-phase 220V 50~60Hz				
Input Power	3.2kW	4.5kW	6.0kW	6.6kW	6.6kW
Oscillation Frequency	1100-2000kHz	1100-2000kHz	1100-2000kHz	200-700kHz	500-1100kHz
Output Current	5-15A	5-20A	10-28A	5-30A	5-30A
Net Weight	20kg	21kg	22kg	23kg	25kg
Main Unit Dimensions	-	-	-	570×260×500mm	520×240×500mm
Extension Unit Dimensions	-	-	-	-	140×90×90mm

3.2kW Ultra High Frequency Induction Heating



High Efficiency & Energy Saving
Operation: Convenient

20KW Ultra High Frequency Induction Heating



Oscillation Frequency: 50-300kHZ
Output Current: 3-15A
Weight: 28kg

6KW-2 Ultra High Frequency Induction Heating



Surface Heat Treatment Equipment
Application: Annealing, Quenching

60KW Ultra High Frequency Induction Heating



Input Current: 12-90A
Application: Heat treatment, etc.
Weight: 77KG



6.0KW-3 Ultra High Frequency Induction Heating

Configuration: Available in Split Type
Weight: 2.5kg



100KW Ultra High Frequency Induction Heating

Splitter: 760x300x600mm
Main Unit: 600x500x880mm
Weight: 120kg

Super Audio Induction Heating

Features

IGBT solid-state inverter technology, high efficiency and energy saving, high output power.



Continuous Operation： Designed with 100% duty cycle for 24-hour stable operation; modular design for easy installation without professional commissioning.

Digital Phase-Locked Technology:Enables automatic frequency tracking with comprehensive protection functions, reliable operation, and simple maintenance.

High Conversion Efficiency: Resonance frequency conversion technology with overall efficiency >95%, ensuring high power conversion efficiency.

Key Features

An advanced equipment that utilizes electromagnetic induction principle to convert mains frequency power into intermediate frequency alternating current (typically 150Hz-10kHz), thereby generating eddy currents inside the metal for efficient and rapid melting or heating.

Model	AJ-30	AJ-50	AJ-60	AJ-80	AJ-120	AJ-160	AJ-200
Input Voltage	Three-phase 380V						
Max Output Power	30kW	50kW	60kW	80kW	120kW	160kW	200kW
Oscillation Frequency	10-30kHz						
Time Setting	1M-99.99M / 0.015-99.99S / 1S-99.99S						
Cooling Water Pressure	0.2MPa	0.3MPa	0.3MPa	0.4MPa	0.5MPa	0.5MPa	0.6MPa
Main/Extension Unit Dimensions	500×400×800 / 300×280×300	500×400×930 / 400×300×300	550×500×940 / 450×300×400	740×660×1000 / 450×450×400	660×600×1680 / 470×400×470	660×600×1670 / 470×400×480	700×600×1880 / 660×400×680
Main/Extension Unit Weight	60kg / 30kg	65kg / 45kg	70kg / 45kg	80kg / 58kg	110kg / 90kg	180kg / 110kg	200kg / 120kg
Water Temperature Requirement	⩽40°C (104°F)						



35KW Super Audio Frequency Heating

Maximum Output Power: 35KW
Input Voltage: Three-Phase 380V
Industry Application: Quenching



40KW Super Audio Frequency Induction

Specifications: 40KW
Welding, Heating
Heat Treatment

60KW 40KW Super Audio Frequency Induction

Cooling Water Pressure: 0.3MPa
Water Temperature: ⩽40°C
Main Unit Weight: 180kg





160KW 40KW Super Audio Frequency Induction

Cooling Water Pressure: 0.5MPa
Product Application: Quenching
Main Unit Weight: 180kg

Quenching Machine Tool

Features

Available in vertical and horizontal types. Works with induction power supplies to realize induction quenching processes controlled by PLC programs. Commonly used for quenching and heat treatment of gears, shaft components, and various mechanical parts.



Outer Cylinder Quenching： For overall or localized quenching of outer cylindrical surfaces of various shafts, bars, tubes, and round components.

Inner Cylinder Quenching： For overall or localized quenching of inner cylindrical surfaces of various tubes and mechanical parts, such as cylinder liners and bearings.

End Face & Surface Quenching： For overall or localized quenching of end faces and flat surfaces of mechanical parts.

Large-Sized Parts Quenching： For overall or localized quenching of large and heavy components, such as marine gears, dam gate rails, and large oil pipelines.



CNC Quenching Machine Tool (Stroke 1-1.5M)

Quenching process and heating temperature curve
Application: Quenching of shaft-type bars

1m Vertical Quenching Machine Tool



Cooling Control: CNC system automatic control
Max. Quenching Length: 1000mm
Max. Workpiece Weight: 50kg



Large Quenchin Machine Tool

Machine bed, upper/lower clamping devices, clamping & rotating mechanism, quenching liquid cooling circulation system, electrical control system..

Metal Hot Working Systems

Features

One-stop hot working system integration from heating and feeding to precise temperature control. Includes intermediate frequency heating power supply, automatic feeding mechanism for bars and shaped parts, closed-loop cooling system with infrared temperature measurement (compatible with 1-10HP chillers), and high-efficiency components such as plate heat exchangers.

Infrared Thermometer

Temperature Control: Automatic
Compatible With: Induction heating machines
Constant Temperature Holding: Adjustable time periods





1-10HP Industrial Chiller

Cooling Capacity: 8.36KW
Water Tank Capacity: 60L
Total Power: 3.15KW
Weight: 160KG



Special-Shaped Workpiece Fixture

Heating Process: Provides convenient feeding for loading, transferring, and unloading.
Uniform Feeding Cycle: Controls temperature and time during workpiece heating.

Automatic Bar Feeder



Customizable: Special feeding equipment for irregular workpieces.
Uniform Feeding Cycle: Reduces workpiece wear.

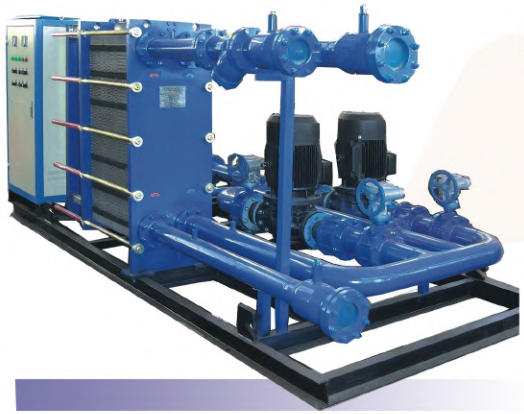


Plate Heat Exchanger

Pure Water Ci rculation: Reduces scale formation.
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Square Cooling Tower

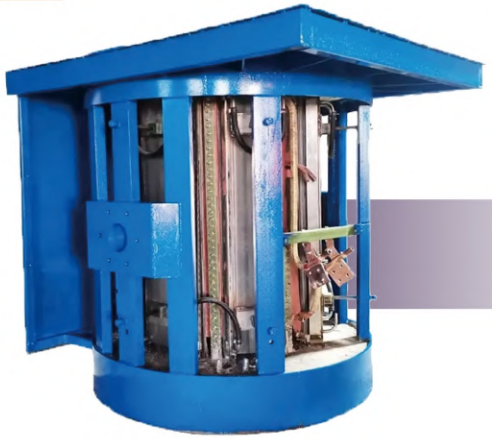


技术参数

Square Cooling Tower Widely used for circulating water cooling in induction heating equipment such as through-heating furnaces, quenching furnaces, and melting furnaces. Offers advantages including excellent heat dissipation, reduced circulating water impurities, large-tonnage cooling capacity, stable performance, and durability.

Cooling Principle of Closed-Circuit Cooling Tower: Water is sprayed outside the wall-type heat exchanger with forced ventilation. Heat transfers from the cooled fluid inside the wall-type heat exchanger through the wall surface to the sprayed water outside, then to the air through forced convection between the sprayed water and air. The heat transfer from sprayed water to air primarily consists of latent heat from evaporation and sensible heat exchange between sprayed water and air.

Coreless Induction Melting Furnace

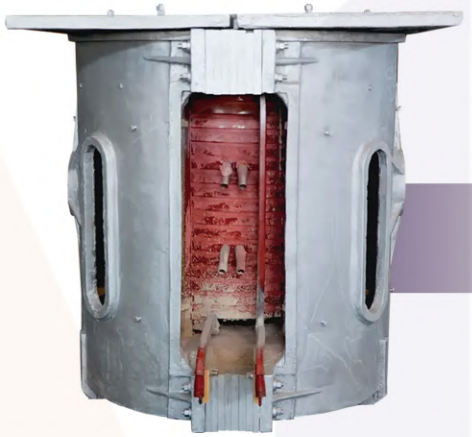


Technical Parameters

Convenient replacement of furnace bodies with different weights, materials, and starting methods to meet various melting requirements.
Intermediate frequency magnetic field provides magnetic stirring effect on molten metal, beneficial for uniform composition and slag floating.
Energy-saving, 24-hour continuous melting capacity, very easy installation and operation.

Furnace Model	AJ-0.15	AJ-0.20	AJ-0.25	AJ-0.30	AJ-0.50	AJ-0.80
Actual Molten Steel (kg)	150-250	200-350	250-400	300-450	500-750	800-950
Furnace Model	AJ1.0	AJ-2.0	AJ-3.0	AJ-5.0	AJ-10.0	AJ-12.0
Actual Molten Steel (kg)	1000-1300	2000-2800	3000-3800	5000-5500	10000-11500	12000-13500
Melting Time per Heat (min)	55-75	60-70	60-75	70-95	75-95	80-100

Aluminum Shell Melting Furnace



Technical Parameters

Heavy-Duty Copper Busbars – Lower resistance, more energy-efficient
Bottom Cooling Rings – Reduce heat buildup, extend service life
Voltage Boosting Circuit – Improves power output, reduces cable losses
High Energy Efficiency – Saves up to 150-200 kWh per ton compared to standard models

Parameter	KGPS-0.5T-3	KGPS-0.5T-2	KGPS-0.75T-2	KGPS-0.75T-3	KGPS-0.75T-5
Furnace	High-voltage induction furnace, voltage up to 3700V, can reduce reactive current by 60%, and save 200 kWh per ton of molten iron				
Furnace Shell	Diameter 1.15m, height 1.36m	Diameter 0.91m, height 1.30m	Diameter 1.10m, height 1.30m	Diameter 1.10m, height 1.35m	Diameter 1.15m, height 1.46m
Induction Coil Inner Diameter	530mm	550mm	630mm	630mm	600mm
Number of Induction Coil Turns	30 turns	17 turns	17 turns	25 turns	30 turns
Induction Coil Copper Tube Specification	25×20×4mm	25×40×4mm	25×40×4mm	25×30×3mm	25×20×4mm

3T Hydraulic Tilting MF Furnace



Technical Parameters

Operating voltage up to 5600V, reducing reactive current by 60%, saving 200 kWh per ton of molten iron.Advanced capacitor configuration improves power factor and reduces energy loss, saving 25 kWh per ton of molten steel.Powerful and stable hydraulic mechanism enables smooth and precise furnace tilting, safe pouring operations, and increased production efficiency.

Parameter	KGPS-3T-3	KGPS-3T-5	KGPS-3T-8	KGPS-3T-8G
Furnace	High-voltage induction furnace, voltage up to 2600V, can reduce reactive current by 60%, and save 100 kWh per ton of molten iron	High-voltage induction furnace, voltage up to 3600V, can reduce reactive current by 40%, and save 90 kWh per ton of molten iron	High-voltage induction furnace, voltage up to 5400V, can reduce reactive current by 60%, and save 200 kWh per ton of steel	High-voltage induction furnace, voltage up to 5600V, can reduce reactive current by 60%, and save 200 kWh per ton of molten iron. Adopts extra-large heat-resistant steel shell, durable and not easy to burn out, with hydraulic tilting system for powerful operation
Furnace Shell	Diameter 1.5m, height 1.55m	Diameter 1.5m, height 1.8m	Diameter 1.5m, height 1.8m	L: 1.65m, W: 1.65m, H: 1.85m
Induction Coil Inner Diameter	980mm	950mm	950mm	950mm
Number of Induction Coil Turns	18 turns	19 turns	31 turns	31 turns
Induction Coil Copper Tube Specification	25mm × 50mm × 4mm	25mm × 45mm × 4mm	25mm × 35mm × 5mm	25mm × 35mm × 5mm

8T Remote MF Induction Furnace



Technical Parameters

Single cabinet drives dual furnaces for simultaneous melting and holding, boosting flexibility and utilization.

Patented control dynamically adjusts load per transformer capacity, preventing overload or idling.

Real-time monitoring of lining wear and current abnormalities prevents leakage and damage.

Parameter	KGPS-8T-3	KGPS-8T-6	KGPS-8T-10
Rectification Technology	6-phase 12-pulse rectification to eliminate 5th, 7th, and 9th harmonics		
Furnace	High-voltage induction furnace, voltage up to 5200V, can reduce reactive current by 60%, and save 200 kWh per ton of molten iron		
Furnace Shell	Height 2.1m, diameter 2.0m, reducer 631 (dual)	Height 2.3m, diameter 2.0m, reducer 631 (dual)	Extra-large stainless steel shell, L: 2.7m, W: 2.7m, H: 2.5m, with hydraulic tilting system
Induction Coil Inner Diameter	-		
Number of Induction Coil Turns	Dual 13 turns	Dual 18 turns	27 turns, series structure
Induction Coil Copper Tube Specification	25mm × 45mm × 4mm	25mm × 40mm × 5mm	25mm × 60mm × 5mm

1.5T MF Induction Control Cabinet



Technical Parameters

Smart remote control system features fast protection, reliable thyristors, excellent starting performance, and user-friendly interface.Large-section copper busbars improve conductivity and reduce power loss.Bottom cooling ring design enhances furnace durability, reduces failure rate, and minimizes bottom heat loss.Energy-saving capacitor banks significantly reduce reactive current and improve power factor.

Component	Parameter	KGPS-1.5T-3	KGPS-1.5T-5	KGPS-1.5T-8
Electric Cabinet	Rated Incoming Voltage	700V, medium frequency output voltage (induction furnace) 2600V	1000V, medium frequency output voltage (induction furnace) 3600V	
	KK Thyristors	1200A/1800V, 8 pcs	1000A/1800V, 12 pcs (Taiji)	1000A/1800V, 12 pcs (Taiji)
	KP Thyristors	1200A/3000V, 6 pcs	1000A/3500V, 12 pcs (Taiji)	1000A/3500V, 12 pcs (Taiji)
	Air Circuit Breaker	1600A/motorized	1600A/motorized	1600A/motorized (Shanghai People's Electrical Appliances)
	Installed Copper Busbar	60mm × 6mm	80mm × 5mm	80mm × 6mm
	Reactor	Copper tube diameter 16mm, 6 coils	Copper tube diameter 16mm, 8 coils	16mm copper tube, 8 coils. Integrated inductor (proprietary tech) replaces reactor, cuts low power consumption by 75%. Auto-protection, maintenance-free, high reliability.Conventional reactors: hollow coils, small conductive area, high loss, complex water cooling, difficult maintenance, high failure rate.
	Intelligent Remote Control System	Our core technology, high reliability, easy operation, convenient debugging and maintenance		

8T Remote MF Induction Furnace



Technical Parameters

New furnace eliminates water cables — removes key failure source, cuts power consumption, improves reliability and efficiency.

New design fully conceals wires and water pipes inside furnace body with no exposed external lines.Inductor coil fully enclosed with continuous dust filtration and automatic temperature/humidity control, maintaining a clean and dry internal environment.

High-frequency high-permeability magnetic yoke — excellent shielding, minimal heat generation, no water cooling. Far lower loss than old low-frequency silicon steel yokes.

Large 201 stainless steel furnace frame — high strength, shields magnetic field, safe and energy-saving. Coils: high-purity thick-wall oxygen-free copper tube, sandblasted insulation, high conductivity, stable structure, easy installation.

Vacuum Induction Melting Furnace



Technical Parameters

Vacuum Induction Melting Furnace is a fully integrated system that utilizes medium frequency electromagnetic induction to melt metals under vacuum or inert gas protection. It is widely used in the production of superalloys, special steels, rare earth materials, and precious metals, achieving ultra-cleanliness, high purity, and excellent thermal control.

Model	Capacity (kg)	Frequency (Hz)	Power (kW)	Vacuum (Pa)	Water Consumption (t/h)
AJ-RLL-10	10	3000	60	6×10^{-3}	10
AJ-RLL-25	25	2500	120	6×10^{-3}	15
AJ-RLL-50	50	2000	160	6×10^{-3}	25
AJ-RLL-100	100	2000	200	6×10^{-3}	30
AJ-RLL-200	200	1000	200	6×10^{-3}	35
AJ-RLL-300	300	800	250	6×10^{-3}	40
AJ-RLL-500	500	800	350	6×10^{-3}	50
AJ-RLL-1000	1000	800	400	6×10^{-3}	70

25KG Vacuum Melting Furnace



Technical Parameters

Vacuum Induction Melting Furnace operates on the principle of medium frequency induction heating and is equipped with a high vacuum unit, enabling metal melting under high vacuum conditions. It is widely used for nickel-based alloys, special steels, precision alloys, and reactive metals.

Main Application	Used for the production of special alloys and rare alloy materials such as nickel-based superalloys, titanium alloys, stainless steel, and ultra-high strength steel, for melting and casting under vacuum or protective atmosphere.
Main Structure	Vacuum melting chamber, melting unit, mold unit, vacuum system, melting power supply, automatic control system, observation window, alloy feeding device, water cooling system.
Melting Process	Charging → Evacuation → Electric melting → Refining → Casting
Vacuum Degree	Ultimate melting vacuum: 7×10^{-3} Pa; Working vacuum: 7×10^{-1} Pa; Pressure rise rate (vacuum leak rate): ⩽ 3 Pa/h
Input Voltage	380V three-phase, 50Hz
Heating Element	Red copper induction coil
Cooling Water	Flow rate: 8 m^3/h; Pressure: 0.15 ~ 0.3 Mpa
Thermometer	Tungsten-rhenium thermocouple and infrared thermometer
Total Weight	3 tons

MF Vacuum Melting Furnace

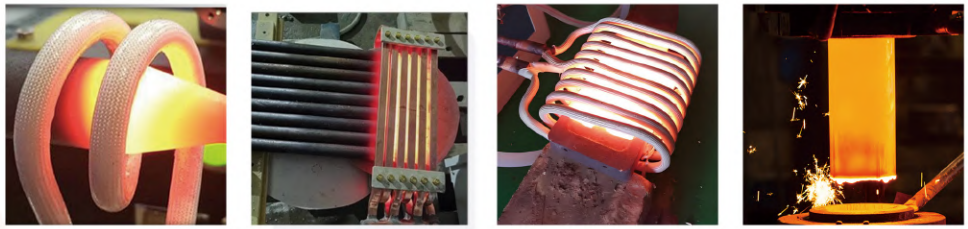


Technical Parameters

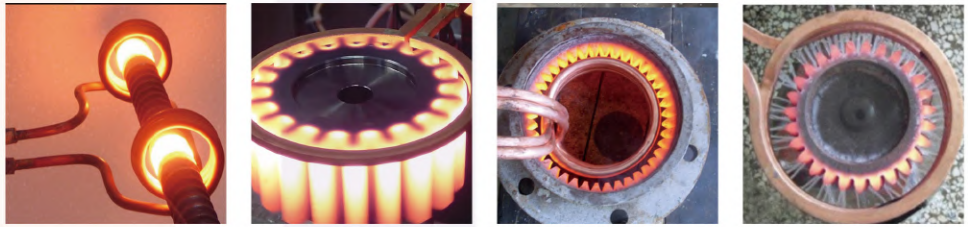
Utilizing medium frequency induction heating, it is widely used in research and production of nickel-based alloys, special steels, titanium alloys, precision alloys, reactive metals, high-temperature alloys, and magnetic materials. It is also suitable for vacuum precision casting of small parts.

Furnace Body	Double-layer air-cooled steel shell; observation window; alloy feeding system
Induction System	High-efficiency copper coil, adjustable frequency and power
Vacuum Unit	Mechanical pump + Roots pump + diffusion pump; high vacuum ensures clean melting
Feeding System	Manual or vacuum-sealed feeder; supports mid-melting material addition
Control System	PLC + touchscreen interface; real-time monitoring of vacuum degree, temperature, and power
Cooling System	Closed-loop water cooling with flow protection and fan-assisted air cooling
Safety System	Smoke detection, over-temperature alarm, water cooling interlock protection

Application: Through Heating & Forging



Application: Quenching



Application: Melting & Welding

