

# 山东荣泰感应科技有限公司

## Shandong Rongtai Inductive Technology Co., Ltd.

*Build a Global Brand of Induction Melting & Heating System  
'Made in China' to be Redefined!*

Provide stable and efficient solutions for high-end inductive melting system

提供稳定高效的高端感应熔化系统解决方案

**Rongtai** 榮泰<sup>®</sup> Since 1997

Shandong Rongtai was founded in 1997, focus on providing stable and efficient high-end induction melting solutions through 19 years. As a manufacturer, we have independent R&D capability. TWIN-POWER and Multi-Power supply melting devices are our core products, our equipments can satisfy foundry industry's requirement of producing consistent and stable molten iron.

After being tested by the State Electric Furnace Product Quality Supervision and Inspection Center, Rongtai electric furnace's all technical indicators are better than the first-class standards. Our principle is "To improve users' operating efficiency through technology and innovation, to enhance customers' competence by improving power efficiency".

山东荣泰感应科技有限公司成立于1997年，19年专注于为用户提供稳定高效的高端感应熔化系统解决方案，作为一家拥有国际领先技术，同时又具有独立研发能力的感应熔化设备制造商，以双供电及多供电熔化系统作为我们的核心产品，满足铸造行业对铁水连续，稳定供应的要求。经国家电炉质量监督检验中心检验，荣泰电炉各项指标大幅优于一等标准，达到国际先进水平。山东荣泰秉承“以科技及创新提升客户经营效益，以设备节能助力客户竞争实力”这一使命，致力于打造感应熔化系统的世界品牌。





# TECHNOLOGICAL BREAKTHROUGH

## 荣泰科技突破

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# RONGTAI INDUSTRIAL STATUS

## 荣泰行业地位

- China Foundry Association Council Member
- China Forging Association Council Member
- China Electricity Industry Association Electric Furnace Member
- Leading company honor granted by Shandong Foundry Association for four years
- Shandong Economic and Information Technology Committee Foundry electric furnace power consumption standard revision company
- Executive member of Shandong Foundry Association Council

受邀参与《全国工业电热设备标准化技术》“中频无心感应炉”及“电压型变频多台中频无心感应炉成套装置”国家标准制订修订单位之一（中国感应熔化行业指定单位）

中国铸造协会理事单位

中国锻压协会理事单位

中国电器工业协会电炉及工业炉分会理事单位

连续四届山东铸造协会铸造材料排头兵企业

山东省经信委铸造电炉能耗标准制订修订单位

山东铸造协会常务理事单位



# NATIONAL AUTHORITY IDENTIFICATION

## 国家权威鉴定

The State Electric Furnace Product Quality Supervision and Inspection Center has tested our SCR tandem resonance medium-frequency melting furnace, the equipment's rated power, rated capacity, operating frequency, power factor, melting rate, unit power consumption, harmonic voltage, coolant temperature and heated component surface temperature rise all conform with national standard GB/T10066.2-2014、GB/T10067.3-2005、GB5959.3-2008. The tested heating temperature is 1450 degree, 1T furnace's unit electric consumption is as low as 520KW.h/t, power factor reaches up to 0.99, which is significantly better than the first-class standard, and users can save considerable electric charge.

国家电炉质量监督检验中心对山东荣泰可控硅串联谐振的中频熔化炉进行用户现场的型式试验测试，产品的额定功率、额定容量、工作频率、功率因数、熔化率、单位电耗、谐波电压、冷却水温度、受热构件表面温升等9项检验项目符合国家标准GB/T10066.2-2014、GB/T10067.3-2005、GB5959.3-2008的技术要求,检测加热温度为1450度，1T炉的单位电耗低至520KW.h/t, 功率因数高达0.99，大幅优于一等标准，达到国际先进水平。对于这个电耗，可以为用户节省的电费相当可观，比同行业产品节电15%以上。







## RONGTAI MARKET ORIENTATION

### 荣泰市场定位

1. Provide upscale inductive-heated system
2. Product design and components selection & purchasing with critical and highest standard. Strict and high standard vendor evaluation and quality control. The core parts and devices all from top brands.
3. Set up a city-level enterprise technology center; focus on inductive heating equipments' research, design and manufacturing technique upgrade. Guarantee equipments have stable function and power efficiency, make sure customers have the maximum value.
4. Build a strict quality control system, control quality in raw materials, technology design, manufacturing process and after sales service.

1. 提供稳定高效的高端感应熔化系统解决方案
2. 向客户提供一流的感应熔化设备，我们总是按照最高标准来进行产品的设计和原材料的选型以及采购。用严格的供应商筛选体系保证原材料的品质，并选择顶级知名品牌作为核心器件的供应商。
3. 设立市级企业技术中心，专业致力于感应熔化设备的研发、设计、制造工艺改进，最大程度保证客户选用设备的可靠稳定性和节能高效运作，保证客户使用价值的最大化！
4. 建立严格的质量管控体系，从原材料、技术设计、生产过程、售后服务各环节检验品质，并持续优化，以此保障做出一流产品。



Melting on customer's site ( furnace with tornado style fume hood )  
客户熔化现场（炉体带龙卷风收尘炉罩）





# RONGTAI POWER-EFFICIENT MELTING FURNACE

## 荣泰节能熔化系统



Power supply, with series tank and dual output design, connects with two furnaces to form the melting system so called “one power supply/two furnaces” . Two furnaces can run at the same time, one is melting while the other holding. Total power can be shared between two furnaces at any required level. Power supply with a fully open rectifier design, so high power factor and minimum harmonics achieved.

串联谐振设计，双输出电源柜与2个炉体构成了电两炉的双供电熔化系统，输出功率可以在两个炉体之间无极任意分配。可以同时两个炉体进行送电，一个保温，一个熔化。电源柜的整流部分采用全开放设计，因此功率因数高，高次谐波小。

World leading cabinet structure, user friendly design, easy to operate and maintain.

Select top components with long service life, e.g. high pressure carbon-free rubber hose, stainless steel hose clamp are all imported from foreign suppliers.

Special wide copper bar used inside power supply use T2 copper material, through sand-blasting and inhibiting processes, to increase conductivity and reduce power consumption, and to make sure stable operating.

Electronic control use digital mode. All digital signal transferred through optical fiber, so the signal has more stable system and high anti-noise capability.

国际先进柜体结构，人性化设计，方便操作者使用并易于维护。

顶级元器件选择，保证元器件具有超长的使用寿命，比如高压无碳胶管，不锈钢喉箍全部采用进口供应商。

宽大特殊处理的铜排，电源柜内连接铜排采用T2优质铜材，并进行喷砂、钝化处理、增加导电性能、降低能耗，保证设备稳定运行。

光纤传输触发信号，电子控制采用数字化模式，数字化控制电路，信号传输全部通过光纤实现，抗干扰能力强，系统更稳定。

### Series Resonance Medium Frequency Coreless Induction Melting System Paratmeters

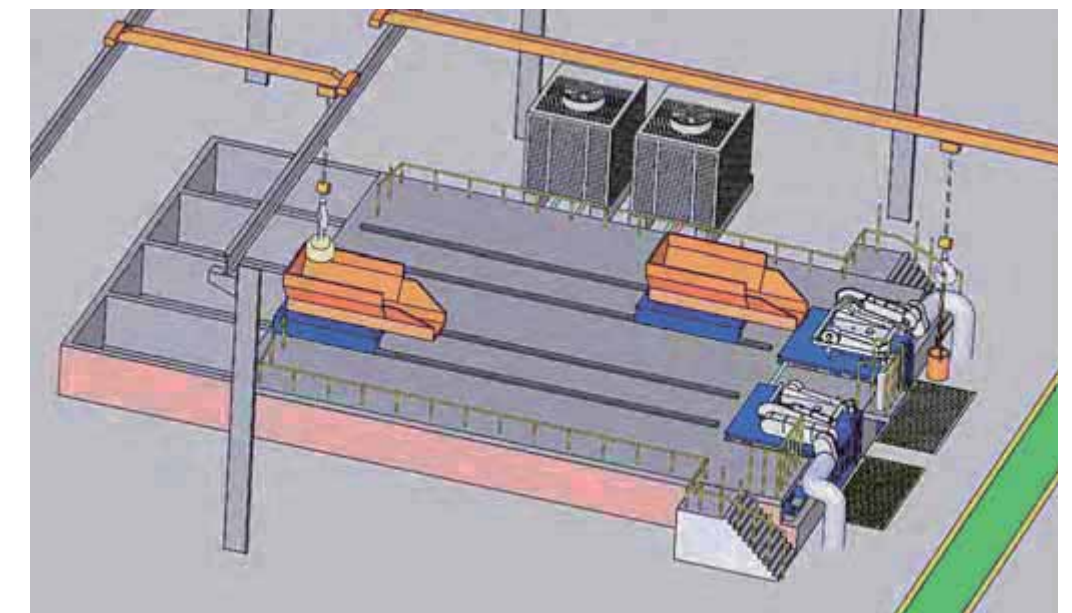
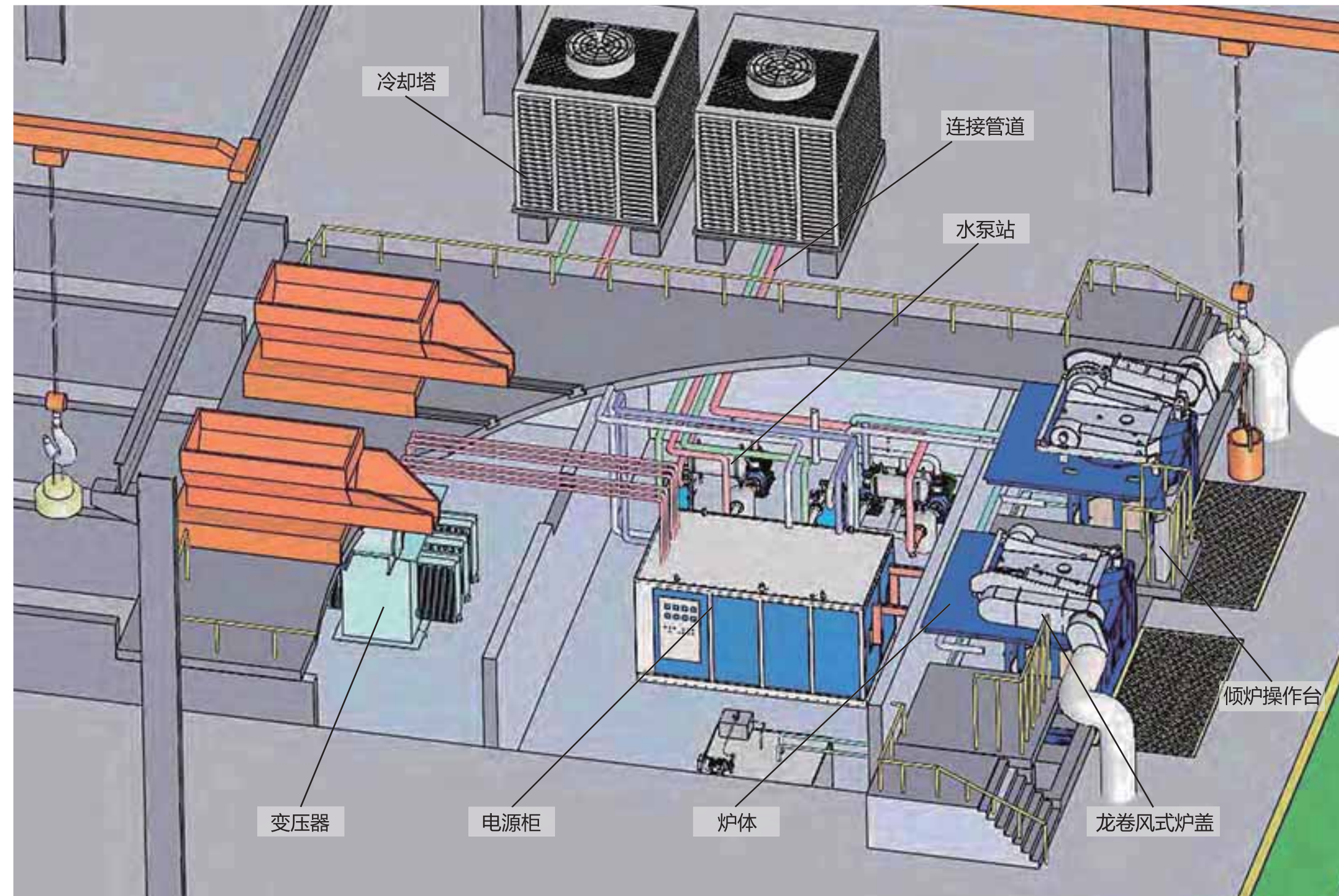
Model 型号	Rated Volume 额定 容量 ( T )	Rated Power 额定 功率 ( Kw )	Rated Frequency 额定 频率 ( Khz )	Power supply mode 供电方式	Line current 进线 电流 ( A )	Voltage 中频 电压 ( V )	Load 负载形式	Model 型号	Rated Volume 额定 容量 ( T )	Rated Power 额定 功率 ( Kw )	Rated frequency 额定 频率 ( Khz )	Power supply mode 供电方式	Line current 进线 电流 ( A )	Voltage 中频 电压 ( V )	Load 负载形式
GW0.5-450-1.5S-CL	0.5	450	1500	380V	738	2200	一拖一	GW3.0-1800-0.5S-CL	3	1800	500	380V双整流串联	1476×2	3500	一拖一
GW0.5-500-1.5S-CL	0.5	500	1500	380V	820	2200	一拖二	GW3.0-2000-0.5S-CL	3	2000	500	660V	1841	3000	一拖二
GW0.75-500-1S-CL	0.75	500	1000	380V	820	2200	一拖一	GW3.0-2000-0.5S-CL	3	2000	500	380V双整流串联	1640×2	3500	一拖二
GW0.75-600-1S-CL	0.75	600	1000	380V	984	2200	一拖二	GW5.0-3000-0.5S-CL	5	3000	500	480V双整流串联	1898×2	4000	一拖一
GW1.0-700-1S-CL	1	700	1000	380V	1148	2200	一拖一	GW5.0-3500-0.5S-CL	5	3500	500	480V双整流串联	2215×2	4000	一拖二
GW1.0-700-1S-CL	1	700	1000	660V	644	3000	一拖一	GW6.0-3500-0.3S-CL	6	3500	300	480V双整流串联	2215×2	4000	一拖一
GW1.0-800-1S-CL	1	800	1000	380V	1312	2200	一拖二	GW6.0-4000-0.3S-CL	6	4000	300	575V双整流串联	2112×2	4500	一拖二
GW1.0-800-1S-CL	1	800	1000	660V	736	3000	一拖二	GW8.0-4000-0.3S-CL	8	4000	300	575V双整流串联	2112×2	4500	一拖一
GW1.0-800-1S-CL	1	800	1000	380V双整流串联	656×2	3500	一拖二	GW8.0-5000-0.3S-CL	8	5000	300	750V双整流并联	2024×2	4000	一拖二
GW1.5-1000-0.5S-CL	1.5	1000	500	660V	916	3000	一拖一	GW10-5000-0.3S-CL	10	5000	300	750V双整流并联	2204×2	4000	一拖一
GW1.5-1000-0.5S-CL	1.5	1000	500	380V双整流串联	820×2	3500	一拖一	GW10-6000-0.3S-CL	10	6000	300	750V双整流并联	2428×2	4000	一拖二
GW1.5-1250-0.5S-CL	1.5	1250	500	660V	1150	3000	一拖二	GW12-6000-0.3S-CL	12	6000	300	950V双整流并联	1917×2	4500	一拖一
GW1.5-1250-0.5S-CL	1.5	1250	500	380V双整流串联	1025×2	3500	一拖二	GW12-7000-0.3S-CL	12	7000	300	950V双整流并联	2237×2	4500	一拖二
GW2.0-1400-0.5S-CL	2	1400	500	660V	1288	3000	一拖一	GW15-7000-0.3S-CL	15	7000	300	950V双整流并联	2237×2	4500	一拖一
GW2.0-1400-0.5S-CL	2	1400	500	380V双整流串联	1148×2	3500	一拖一	GW15-8000-0.3S-CL	15	8000	300	950V双整流并联	2557×2	4500	一拖二
GW2.0-1500-0.5S-CL	2	1500	500	660V	1380	3000	一拖二	GW20-8000-0.3S-CL	20	8000	300	950V双整流并联	2557×2	4500	一拖一
GW2.0-1500-0.5S-CL	2	1500	500	380V双整流串联	1230×2	3500	一拖二	GW20-9000-0.3S-CL	20	9000	300	950V双整流并联	2876×2	4500	一拖二
GW3.0-1800-0.5S-CL	3	1800	500	660V	1657	3000	一拖一								





## TWIN-POWER ONE TO TWO MELTING SYSTEM LAYOUT

## 双供电一拖二熔化系统现场布置图



安装示意图 (布局二层面)



安装示意图 (布局一层面)





## OUR TECHNOLOGY

## 电气技术

World leading technology, independent R&D capability

1. Provide stable inductive power supply, provide the best power choice according to requirements.
2. Power supply with a fully open rectifier design, so high power factor and minimum harmonics achieved.
3. Electronic control use digital mode. All digital signal transferred through optical fiber, so the signal has more stable system and high anti-noise capability.
4. Very competitive power consumption rate.
5. International standard of electric safety design.
6. International furnace structure design, equipments are reliable and easy to be maintained.

消化吸收国际先进技术，拥有自己独特的技术优势：

荣泰为市场提供稳定高效的感应电气系统，可以根据不同的应用提供最佳的电气选择。

整流满开放，功率因数高，高次谐波小。

光纤传输触发信号，电子控制采用数字化模式，数字化控制电路，信号传输全部通过光纤实现，抗干扰能力强，系统更稳定。

极具竞争力的耗电量指标。

符合国际规范的电气安全设计标准。

国际化炉体结构设计，设备安全可靠，易维护。



## ENERGY SAVING AWARD

## 荣获年度节能成果奖

Rongtai' s the sixth generation power-efficient melting device adopts the international advanced new SCR tandem resonance technology, the control panel can automatically adjust when resonance frequency changes, which makes the equipments operate more stable.

荣泰第六代高效节能感应熔化装置采用国际先进的新式可控硅串联谐振技术，调频调功，频率适应范围宽，控制板自适应负载谐振频率，设备运行稳定高效。

Congratulation on Shandong Rongtai self-made the sixth generation high efficient inductive melting equipment acquired the annual Energy Saving Awards.

热烈祝贺山东荣泰自主研发第六代高效节能感应熔化装置荣获年度节能成果奖。



The traditional power-efficient medium frequency melting device' s thermal efficiency ratio is below 0.55 generally, Rongtai' s the six generation melting device' s thermal efficiency ratio is 0.65. For the same power rate, Rongtai' s the sixth generation equipment can improve the heating efficiency by 15%-20%.

For the annual output of 1000t, the traditional power-efficient medium-frequency melting furnace's absolute value of power consumption is equal or greater than 625kw.h/t, Rongtai's the six generation melting device's absolute value of power consumption is 520kw.h/t or less, by using the six generation device, annually 1.05 million degree electricity can be saved.

传统节能中频熔化装置的热效率比值一般为0.55以下，荣泰第六代高效节能中频熔化装置的热效率比值为0.65。同样的功率，荣泰第六代熔化装置的加热效率可以提升15%-20%。

以年产能10000T计算，传统节能中频熔化装置耗电量绝对值 $\geq 625\text{kw.h/t}$ ，荣泰的第六代串联节能熔化装置耗电量绝对值 $\leq 520\text{kw.h/t}$ 。每年可以节省105万度电。





# THE FURNACE BODY TECHNOLOGY

## 炉体技术

Shandong Rongtai furnace body is high-strength standard, which is safe and reliable.

The core induction is coiled by TU1 thickwall oxygen-free copper tube, coil is very well insulated, to ensure uniform interturn and high electricity efficiency.

Shunts use high quality silicon steel plates, the shunts uniformly cover around the inductor. The coverage rate is more than 65%, so the shunts can support the coil evenly from all directions, and direct magnetic field into metal bath. Heat can be evenly cooled, high efficient achieved.

山东荣泰感应科技的炉体是按国际标准制造的重型高强度炉体，刚性好，安全可靠。

核心感应线圈采用TU1厚壁无氧铜管一体绕成，线圈表面特殊绝缘处理，保证匝间均匀，不变形和高电效率。

磁轭选用高矽高品质矽钢片，磁轭均匀的覆盖于感应器周围，覆盖率达到65%以上，从各个方向均匀支撑线圈，将感应磁场聚集到熔池中，散热均衡，节能高效。



Rongtai furnace includes furnace frame, tornado style or fume ring style furnace lid, tilting furnace oil cylinder, shunts, inductor, high pressure carbon-free rubber tube, stainless steel water distributor, backwater collector, clamp, and whole furnace bottom pouring pieces.

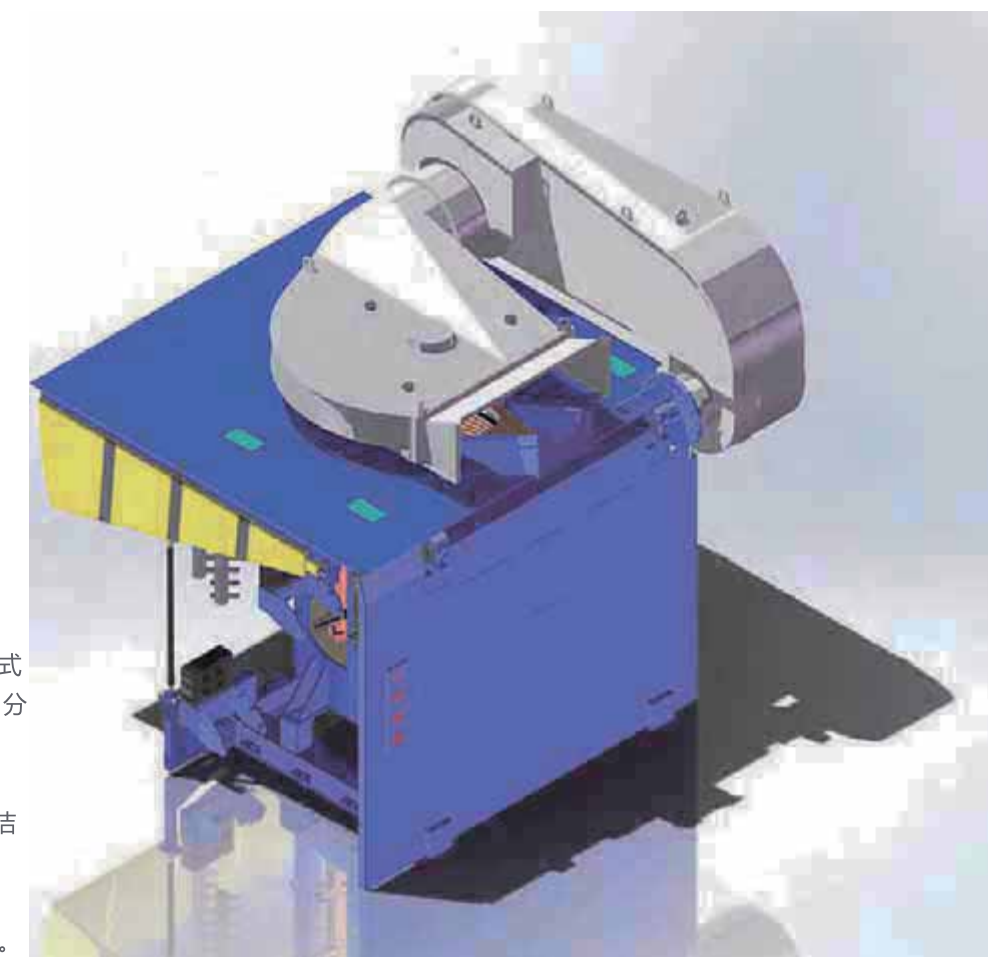
Large "H" shape steel fabricates the basic steel structure of furnace, the overall structure is simple and strong; the maximum tilt angel is 95 degree. Easy to maintain and for daily service.

The fully pouring designed furnace top and furnace bottom's refractory has very high strength.

荣泰感应科技新式炉体包含炉架、龙卷风式或吸烟环式炉盖、倾炉油缸、磁轭、感应器、高压无碳胶管、不锈钢分水器、回水集水器及卡箍、整体炉底浇注块等。

炉架采用大型H型钢构成的开放式炉架，整体结构简洁坚固，最大倾炉角度95度，易于日常维护，检修，美观

整体浇注设计的炉顶和炉底耐火材料具有很高的强度。



## DUST COLLECTION FURNACE LID 炉体收尘炉盖

Rongtai steel furnace has tornado and fume ring style furnace lid, which has excellent dust collection effect, and this can meet the environment protection requirement.

Tornado style fume hood use a strong steel structure design, with imported bearings, and refractory rammed lid is installed in the middle of the hood, the hood can rotate freely, which can collect flue gas and dust easily, at the same time, it can protect operators' safety.

The fume ring dust collection device, which is safe, reliable, easy to operate, and it just occupy a little area.

荣泰钢壳炉体配备龙卷风式和吸烟环式收尘炉盖，具有极佳的收尘效果，达到环保准入要求。

龙卷风式收尘罩，采用坚固耐高温的钢结构设计，进口轴承，吸尘罩中间打筑耐火材料，可前后任意倾翻停留，方便吸走烟气粉尘，同时保护操作人员加料、扒渣、倒铁水。

吸烟环式收尘罩，安全可靠，运动简单，易于操作，占地面积更小。



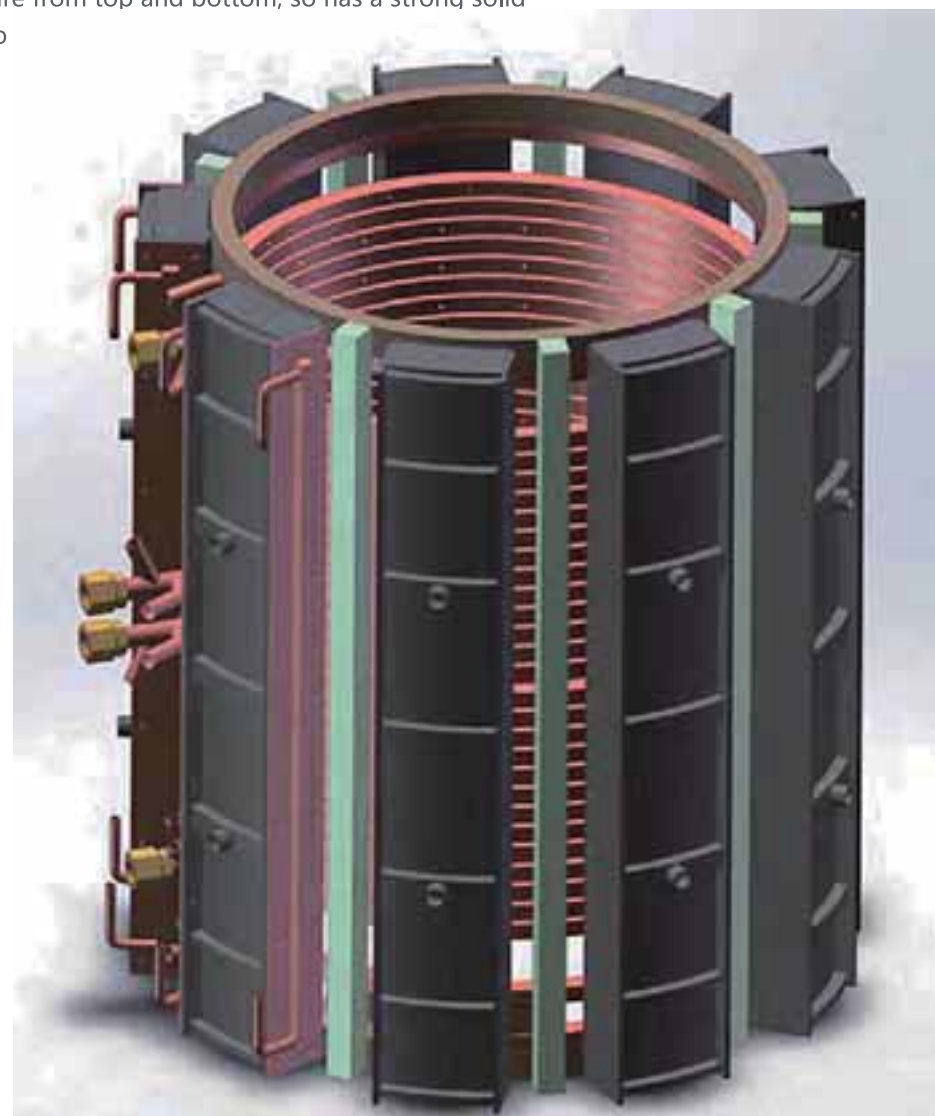


## COIL TECHNOLOGY

### 线圈技术

Induction coil is the core of induction melting system, which is made by cross section thickness constant heavy copper pipe, the copper pipe is made of high quality, solid with high conductive TU1 oxygen-free copper tube. Corresponding strict insulation between two steel coils of induction coil, implanted insulation between adjacent induction coil. The coil is very well insulated, the coil become a strong, complete solid body after applying a complete spray of insulation paint. Coil is clamped and held by steel structure from top and bottom, so has a strong solid structure; no

感应线圈是感应熔化系统的核心，是由横截面壁厚恒定的重型铜管制成的，铜管采用优质、坚实内用的高导电TU1无氧铜管，感应线圈的相应两匝钢管之间严格绝缘，在相邻感应线圈之间植入绝缘片，线圈经绝缘漆喷涂后，成为一个完整的结构，并在炉体中受到上，下钢结构的压制，整体结构坚固、无变形问题。



## Computer Intelligent Management System

### 感应熔化智能控制系统

The network system is composed of computer, digital control panel, PLC and other devices, and it can be extended by switches, such as remote control and other functions. The intelligent system can be used on data collection, transmission and monitoring process.

智能控制系统通过计算机和数字化主控板以及PLC等设备组成一个网络系统，并且可以通过交换机扩展，如远程控制等功能，可以对每台设备实现数据采集、传输和监控。

#### Power Usage Inspection Device

##### 电量检测装置

The system can detect the electrical parameters in the process of equipment operation, including the voltage, current, as well as active power, reactive power, power factor, power consumption and other very practical parameters. In terms of power factor, companies in different area have relatively high requirement on power consumption, and high or low power factors are closely related to the equipment working conditions. Through this system, we can clearly know our power consumption status, and it is easy for us to adjust it in a timely manner.

#### Multi-channel temperature measurement and control Device 多路温度测控装置

1. More temperature measuring points, simple wiring.
2. Can be real-time observed temperature, temperature display, make the operator a measurable concept value, which can be compared with usual numerical data to find the problem, and to bring great convenience by eliminating corresponding position of over temperature breakdown.
3. Different components of the equipment alarm values can be set automatically according to need.
4. Temperature sensor repair is cheaper and low cost. Installing crystal plug is very convenient and easy no matter troubleshooting or replacement.



此系统可检测设备运行过程中的各项参数，包括各项电压、电流、以及有功功率、无功功率、功率因数、工作时间、耗电量等非常实用的参数，特别是对于功率因数来说，各个地区对用电企业都有比较高的要求，而功率因数的高低与设备的工作状态又密切相关，通过本系统可以很明确用电状态，便于及时作出调整。

1. 测温点数多、接线简单。
2. 可实时观测温度，温度值显示，使操作者有一个可以衡量的概念值，可以与往常数值进行比较来发现问题，并对相应超温位置故障的排除带来极大的方便。
3. 根据不同元器件的报警值可以自行设定。
4. 温度传感器维修更换简单，价格低廉。安装使用水晶插头，无论是检查排除故障还是更换都非常方便易行。





## WATER COOLING SYSTEM



Fully closed cooling unit advantage:

- A、 Fully closed circulating cooling, eliminate dust caused by pipeline blockage.
- B、 Cooling use soft water, which can largely reduce scale.
- C、 No need for water pool and cooling tower, little place occupation and convenient for moving.
- D、 High cooling efficiency, low operation cost
- E、 The closed circulating water consumption is little, which is in line with the requirements of environment protection and energy saving requirement.

全封闭冷却系统优点：

- 1、 全封闭式循环冷却，杜绝杂物引起的管路堵塞
- 2、 采用软水循环冷却，无水垢生成，避免因水垢引起的电源、可控硅、电容器、IGBT模块、感应线圈等损坏现象
- 3、 不需水池和冷却塔、占地小、移动方便
- 4、 散热效率高、运行成本低
- 5、 封闭式循环，水耗量很小，符合节能环保的要求

## QUALITY CONTROL SYSTEM

### 严格的质量管控系统



Strict controlled manufacturing inspection system

认真严谨的过程检验



Real time tracking of technology inspection

实时跟踪的工艺检验



No-load test before delivering

出厂前整机空载试验

Rongtai equipment's core components are all chosen from top famous brand, and establish a strict supplier access mechanism, establish a rigorous system of purchased parts quality inspection at the same time. Establish mobile cards for each component, to ensure components installed are controllable and traceable.

荣泰所制作装备的核心元器件均选用顶尖知名品牌，并建立有严格的供应商准入机制，同时建立有严谨的外购件质检体系，每个装机元器件都建立有流通卡，保证装机的每一套元器件质量均为可控可追溯。







## SERVICE WITH HEART 心服务

### 荣泰学院第二十一届中频炉培训班合影

The twenty-first section of intermediate frequency melting training class photo

- Customers' satisfaction is ALWAYS our pursuit
- Work principle: Thoughtful service, quick respond, professional technology
- A team of top skilled and highly qualified customer service people
- Rongtai Technology Service Hotline : 137 9369 7896

服务目标：客户满意是荣泰人不懈的追求

工作准则：服务贴心、响应迅速、技术专业

售服团队：一支具备精尖技能、优秀素养的客户  
服务团队

荣泰售服专线：137 9369 7896

## SERVICE LINE 服务星快线

With almost 20 years market experience, we bring out a lifelong technical service: to provide free, lifelong, continuously upgrading personnel training plan for inductive-heated customers. Formal training classes are taught by certified technicians at our facility. The objective is to provide end-users with hands-on training, troubleshooting, diagnostic and maintenance techniques.

我们结合近20年的市场服务经验，推出一套终身型的技术服务项目：荣泰技术学院为用户提供终身、免费、持续升级的人才培养计划。我们从设备选型、节能使用、维护保养、故障排除等全方位角度进行课程设置，为用户培养出中频感应电炉的专业使用人才。

## AFTER SALES

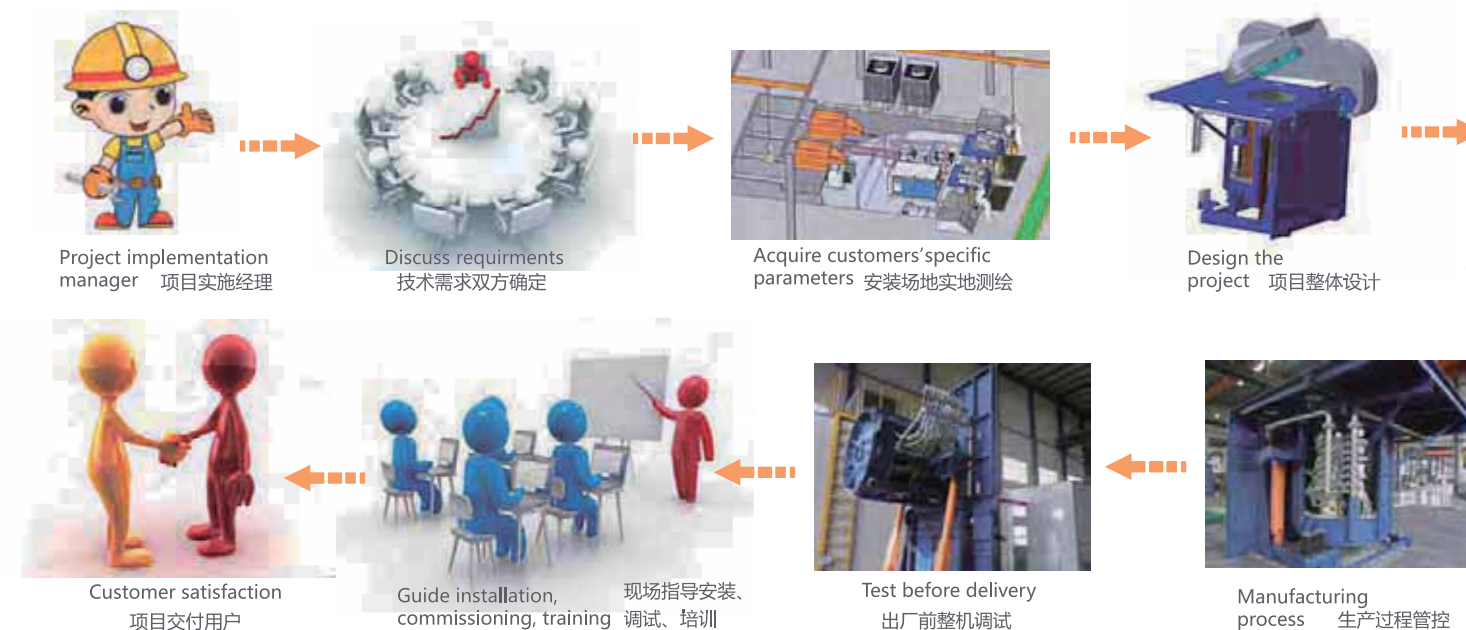
### 售服工作纲领

Rongtai has a quick and thoughtful modern after sales service system, we not only provide users one-to-one engineer service on site, but also provide components from top brand.

荣泰感应科技建立有一套快捷、贴心的现代售后服务系统，旨在为用户提供省心、省钱、省力的零距离售后服务，我们为用户提供的不仅仅是全方位的一对一现场工程师服务，更包括国际国内一线品牌元器件的优质优价供应。

### USER SERVICE FLOW DIAGRAM:

项目服务流程示意图：







## RTCL MEDIUM-FREQUENCY INDUCTIVE-HEATED SYSTEM

- Accurate temperature control, precise end product, long life cycle.
- High efficient and energy saving
- The transporting speed of materials transmission is adjustable
- Small erosion, low noise, no need for other equipment when transporting materials
- Little temperature difference between inside and outside of bar stock, bar stocks will not stick together under high heat.
- Using inductor changer can largely improve work efficiency
- A high degree of automation, process parameters can be set in advance, simple operation.

## RTCL 中频感应加热系统

温度精确控制，锻件成形尺寸精度高，模具寿命长  
高效节能，在生产间歇期间无需能耗，对操作人员热辐射小  
坯料输送速度可调  
磨损很少与无噪音坯料输送  
坯料的输送及加热无需其他设备  
芯表温差极小，高温坯料不会粘接  
利用感应器快速装置可以有效的缩短更换加热坯料所需时间  
自动化程度高，工艺参数可预先设定，重复精度高，操作简单

## PRODUCTS 产品系列

### 锻造领域 FORGING FIELD

- |  |                  |
|--|------------------|
| Medium-frequency induction heating equipment     | 中频感应透热成套设备       |
| Forging mechatronics inductive-heated equipments | 锻造机电一体化感应加热设备    |
| Forging heating production line                  | 锻造加热生产线          |
| Supporting press forging heating production line | 配套万吨级压力机用锻造加热生产线 |
| Energy saving diathermanous equipment            | 节能型透热成套设备        |

### 热处理设备 HEAT TREATMENT EQUIPMENT

- |  |                |
|--|----------------|
| Pin tempering production line  | 销轴调质生产线        |
| Round steel tempering production line(pipe)                                | 圆钢（管）调质生产线     |
| Oil production line of vitrified clay pipe                                 | 油缸管调质生产线       |
| Sucker rod production line   | 抽油杆调质生产线       |
| Car lifting oil cylinder tempering production line                         | 汽车举升油缸调质生产线    |
| Coal mine single prop tempering production line                            | 煤矿单体支柱调质生产线    |
| Mining(Marine)satin adjusting quality production line                      | 矿用（船用）锻条调质生产线等 |
| Medium-frequency, super audio surface quenching complete sets of equipment | 中频、超音频表面淬火成套设备 |

### 铸造领域 FOUNDRY FIELD

- SCR series resonant medium-frequency melting furnace
- |  |         |
|--|---------|
| 可控硅串联谐振中频熔化炉   |         |
| Series resonance(one to one)   | 串联谐振一拖一 |
| Series resonance(one for two)  | 串联谐振一拖二 |
| Series resonance(multi split)  | 串联谐振一拖多 |
| Medium-frequency melting furnace selective equipment(include dust-extraction device, charging car) |         |
| 中频熔化炉配套可选设备（包括除尘装置、加料小车等）  |         |







## PART OF OUR USERS

