HANI TECH

High-tech enterprise in Shaanxi Province

Xi'an Top 100 Foreign Trade Enterprises

2022 China•Shaanxi•Xi'an

Integrity Creates Quality

Innovation Leads The Future

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COOPERATION

COMPANY PROFILE

XI'AN HANI TECH CO., LTD

Xi'an Hani Tech Co., Ltd is a melt shops and long products rolling mills manufacturing company, mainly engaged in electric arc furnaces, submerged arc furnaces, ladle refining furnaces, blast furnace, induction furnaces, intermediate frequency furnaces, continuous casting machines, reheating furnaces, bar and wire mills, high-speed wire mills, high-speed rebar mills, TMT mills, flying shears, cold strip mills. Specializing in the design, manufacture, installation and commissioning, service and general contracting of metallurgical equipment, continuous casting machine equipment and rolling mill equipment.

We can provide "turnkey" services of design, manufacture, installation and commissioning according to your requirements for metallurgical equipment, continuous casting machine equipment and rolling mill equipment.

From the initial conception of the plant, Hani Tech is a one-stop supplier capable of designing, manufacturing, installing and commissioning your metallurgical equipment plant, continuous caster equipment plant, rolling mill plant from A to Z.

Hani Tech's high-efficiency billet continuous casting technology and alloy steel continuous casting series technology are characterized by high casting speed, high operating rate, high output and high quality, and have always maintained a leading level.

The company has more than one hundred technicians, including senior engineers, senior consultants, engineers, etc., with strong design capabilities and a strong technical force. Our products are extensively used in steel plant and mechanical industries, we become the leading steelmaking furnaces manufacturer in this industry in the mainland of China.

XI'AN HANI TECH CO., LTD

Depending on decades of production experience, our company acquired the specific high manufacture technology to achieve the excellent products with the best quality. Our high-quality products have passed the ISO:9001 certificate and we update our manufacturing and management levels to international standards.

The electric arc furnace, submerged arc furnace, and refining furnace produced by Hani Tech has adopted and innovated the most advanced tubular water-cooled furnace cover technology, tubular water-cooled furnace wall technology, and copper-steel composite plate conductive cross arm technology, EBT tapping technology, and large cross-section at present. Water-cooled cable technology, PLC control technology, high-impedance technology, auxiliary energy technology such as carbon-oxygen lance oxygen burner, oxygen-enriched operation technology, and hot metal hot charging technology have all been applied in electric furnaces. More specialized and precise design and manufacturing can be achieved for various furnace types.

Hani Tech has won praises from users with its superb technical force, rich manufacturing experience, strict scientific management, and excellent after-sales service.

XI'AN HANI TECH CO., LTD

Hani Tech's one-to-one high-quality service realizes rapid response promptly solves technical and product quality problems, provides technical training and related technical support at any time, and provides customers with high-quality services to the greatest extent. The maximum value is implemented to ensure customer satisfaction.

We integrate the processing, test methods, and special manufacturing methods to build our own administration system, quality system, and techniques system. Our products are widely recognized and trusted by users and can meet continuously developing economic and social needs.

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In order to further develop the international market, we have successively set up three overseas offices: Dubai Office of the United Arab Emirates, Yangon Office of Myanmar, and Tehran Office of Iran.

Enterprise Qualification

统一社会信用代码
91610131333698 46XJ

营业执照

名　　称　西安含谊新能源科技有限公司
类　　型　有限责任公司(自然人投资或控股)
法定代表人　钱冲
经营范围　一般经营项目：新能源科技的技术开发、技术转让、技术咨询、技术服务；太阳能产品的开发、销售及技术服务；市场营销策划；企业管理咨询；会务服务；计算机软硬件、数码产品、通讯器材（不含地面卫星接收设备）、电子产品、办公用品、工具设备、机电产品的开发和销售；建筑装饰材料（除木材）、包装材料、针纺织品、皮革制品、文具用品、日用百货的销售；货物与技术的进出口业务（国家限制和禁止进出口的货物和技术除外）。（以上经营范围除国家规定的专控及前置许可项目）

注册资本　伍佰万元人民币
成立日期　2015 年 04 月 30 日
营业期限　长期
住　　所　陕西省西安市高新区丈八街办丈八五路高科尚都 ONE 尚城 B 座 1604

登记机关
2019 年 09 月 27 日

国家企业信用信息公示系统网址：http://www.gsxt.gov.cn　　国家市场监督管理总局监制

The electric arc furnace, submerged arc furnace, and refining furnace produced by Hani Tech has adopted and innovated the most advanced tubular water-cooled furnace cover technology, tubular water-cooled furnace wall technology, and copper-steel composite plate conductive cross arm technology, EBT tapping technology, and large cross-section at present. Water-cooled cable technology, PLC control technology, high-impedance technology, auxiliary energy technology such as carbon-oxygen lance oxygen burner, oxygen-enriched operation technology, and hot metal hot charging technology have all been applied in electric furnaces. More specialized and precise design and manufacturing can be achieved for various furnace types.

Advantages of Submerged Arc Furnace EPC Project

Xi'an Hani Tech Co., Ltd. is a professional submerged arc furnace manufacturer with advanced processing and testing technologies. It is one of the domestic submerged arc furnace manufacturers with the strongest technical strength. The company has an electric furnace production branch and low-voltage reactive power compensation equipment. Production branch, flue gas purification system production branch, non-standard parts production branch, casting branch.

01 **Can Provide Complete Sets of Submerged Arc Furnace Technology and Equipment**

It has a unique competitive advantage that can effectively save investment costs, self-produce the whole process, controllable quality and construction period, all self-construction, and smooth process connection.

02 **Furnace Commissioning and Production up to Standard**

At present, the construction of submerged arc furnaces in the industry and the use of the owners are often two links. Due to the unreasonable design of the furnace type of the construction unit, the furnace start-up is not smooth. It has always been the goal of the majority of owners. Hani Tech provides products and services to more than 1,000 domestic customers, and has a good reputation. The company has gathered a large number of front-line production technicians, and can provide customers with integrated services from furnace commissioning to production assessment. This is also one of the advantages that many electric furnace manufacturers do not have.

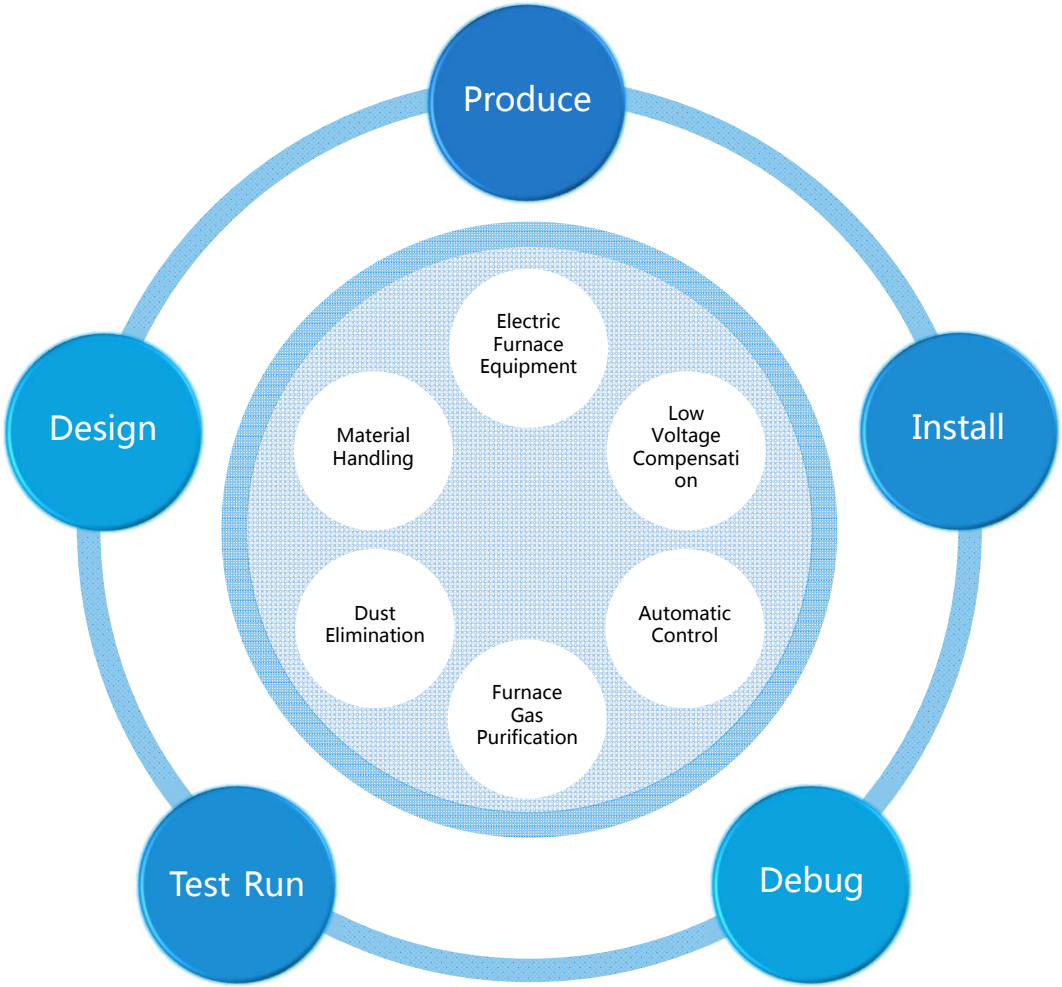
03 **Practical Training**

Furnace opening is only a part of the service we can provide. Considering the needs of the owner's operators to quickly adapt to the production of electric furnaces, we can also provide production technicians to learn from the smelting site of similar production enterprises until all personnel can operate proficiently, to achieve the best production capacity target of submerged arc furnace.

04 **Technological Innovation and Quality Control**

Years of working experience in the submerged arc furnace industry has demonstrated our excellent innovation ability. In order to continuously meet the needs of customers, Hani Tech has established a technical information department to facilitate communication with customers and understand new products and new products obtained in the process of customer production practice. At the same time, an innovation fund was established to support enterprise technical personnel in technological innovation and transformation. The company has the production capacity of the main equipment of submerged arc furnace, low-voltage reactive power compensation equipment, electric control system equipment and other submerged arc furnace products, as well as the production capacity of Hani Tech's full series of products, so that the company can have certain quality control of the equipment in any process engineering.

Management Flow Chart



PRODUCT INTRODUCTION

Submerged Arc Furnace

Submerged Arc Furnace General Contracting Project

On the basis of many years of submerged arc furnace technical services, Hani Tech has developed a new type of submerged arc furnace general contract project by optimizing the combination and giving full play to its own advantages in design, manufacturing and service. Has the following characteristics:

1. High Investment Efficiency and Cost Saving

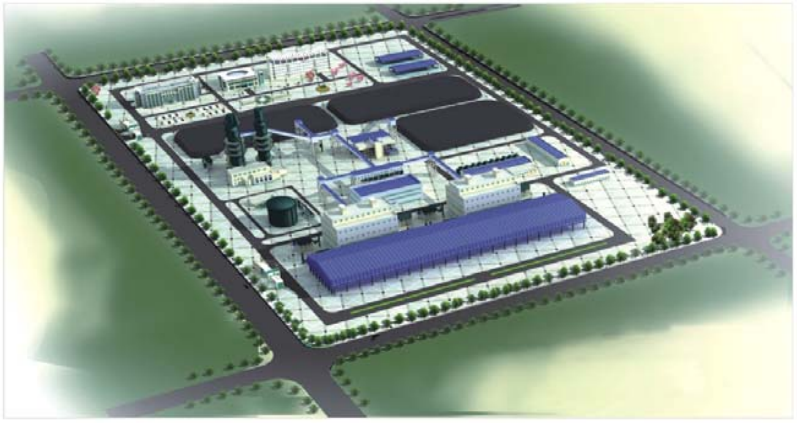
After more than ten years of accumulation, our company has developed into the most powerful equipment manufacturing enterprise in the industry. It can provide customers with all-round services from design to operation, effectively reduce the cost increase caused by project subcontracting, and save valuable funds for customers projects.

2. Energy Saving, High Efficiency and Stable Operation

Through long-term research, we found that there is generally a disconnect between design and actual operation in the submerged arc furnace industry, resulting in a low power factor of the furnace during later operation, and unsatisfactory output and indicators. Based on this, our company has introduced various types of professionals with rich practical experience, and fully considered the actual operation in the design to ensure the stable, efficient and low-consumption operation of the equipment.

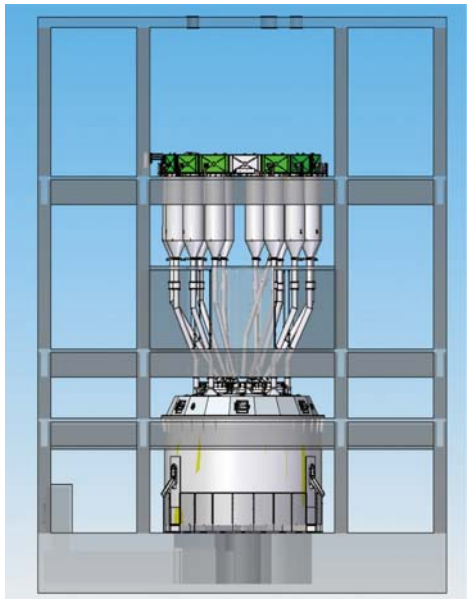
3. Advantages of Full Service

The general contracting of submerged arc furnace main equipment is an extension of our company's various services. Combining our company's existing manufacturing and service advantages, we can provide customers with all-round services such as submerged arc furnace system design, main equipment manufacturing, system installation and commissioning, and process commissioning.

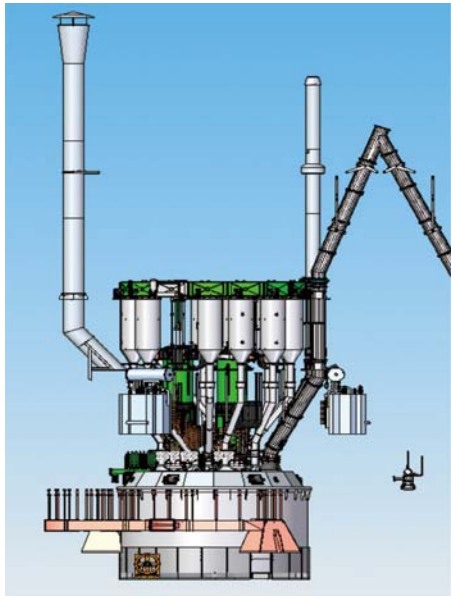


Submerged Arc Furnace

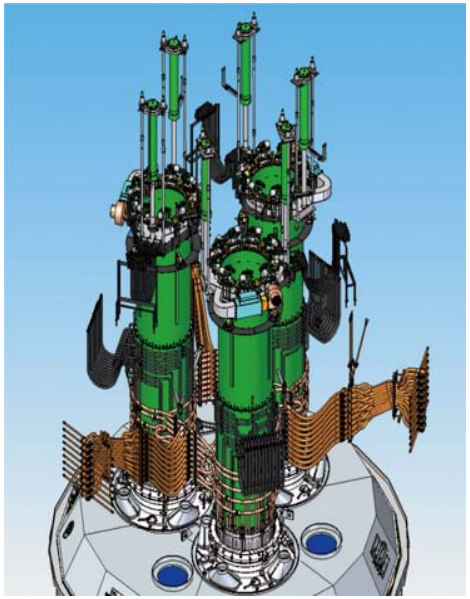
3D Schematic Diagram of the Main Body of the Electric Furnace



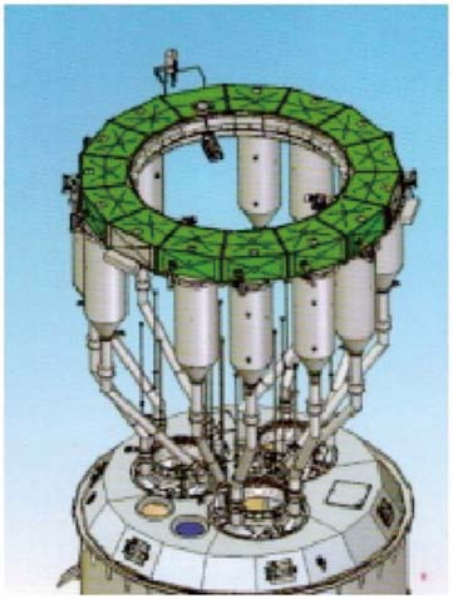
Schematic Diagram of the Main Body of the Electric Furnace (1)



Schematic Diagram of the Main Body of the Electric Furnace (2)



Schematic Diagram of Electrode Column



Schematic Diagram of Feeding System

Submerged Arc Furnace

Submerged Arc Furnace Automatic Control System

Automation Control Requirements ：

Automatic control of electrode lifting: the control mode is divided into manual/automatic mode; the manual mode is button operation; the automatic mode is divided into three automatic control modes: constant current, constant power, and current pressure ratio, and the operator chooses the automatic control mode according to the working conditions;

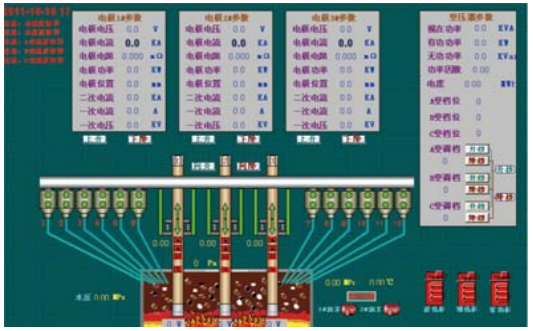
Automatic control of the hydraulic system: the control mode is divided into local/remote control mode; the remote control mode control system automatically presses and releases the electrode pressing system according to the system power and current;

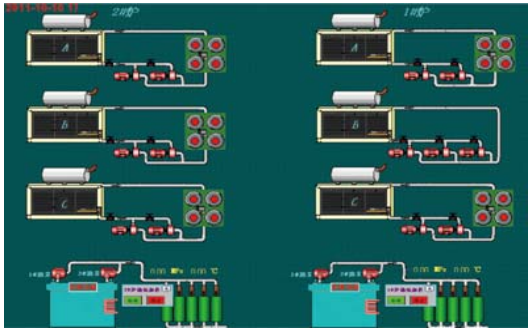
Cooling water automatic control: monitor and control the current, state, frequency, start and stop of the pump in the cooling water system, monitor and alarm the return water flow and temperature of each equipment, and prompt the equipment for water leakage;

Batching automatic control: The control methods are divided into local/remote control and manual/automatic methods; through the batching weighing device, various raw materials are accurately batched according to the preset goals, and the ratio is automatically adjusted according to the operator station setting to achieve material Proportioning accuracy and dynamic mixing accuracy, the metering accumulation signal adopts the pulse signal to achieve the rationing accuracy of ±0.2%; automatically judges the fault of the material bridge, and prompts the on-site inspection personnel to deal with it on the spot;

Conveying automatic control: The control methods are divided into local/remote control, manual/automatic; the conveying sequence control system automatically starts and stops the feeding signal according to the detection of the material level of the furnace top silo, and reversely starts the entire belt conveying system. The materials are transported batch by batch to the silo that needs to be supplemented with raw materials. When the conveying equipment fails, the conveying equipment before the faulty equipment will be stopped by interlocking, and the conveying equipment after the faulty equipment will be stopped after a delay;

Automatic control of tail gas treatment: from the electric furnace section to the purification section to the tail gas user, it is a complete gas path balance adjustment system. The cascade adjustment of the pressure, temperature and flow of the entire system is carried out by using the cascade critical proportion method in the control system. To ensure the stable operation of the system.





Submerged Arc Furnace

Submerged Arc Furnace Automatic Control System

Advantages of Automatic Control：

High level of automation: centralized control is realized from raw materials - electric furnace - furnace gas dedusting. On-site equipment adopts video surveillance to reduce the occurrence of safety accidents and reduce occupational hazards.

High system reliability: The key equipment of the control system adopts redundancy technology to realize the redundancy of the main control unit, communication system and power supply system. When any key equipment fails, it will automatically switch to the hot redundant unit, which will not affect the production process. make an impact.

Changes in production operation mode: production is mainly based on on-site operations, and multiple operation rooms are divided into multiple operation rooms. The operation mode is changed from a relatively extensive operation mode to a centralized control + on-site inspection operation mode, and a centralized control room is set up to focus on automatic operations.

A large number of operators are reduced: the centralized control mode improves the automation level of electric furnace production, and combines multiple operating rooms into one operating room, which greatly reduces operating personnel and reduces the production cost of production enterprises.

Reduce occupational hazards: production operators reduce operating time in dusty, high-temperature, flammable and explosive environments, reduce occupational hazards, and improve social benefits.

Facilitate production management: the control system records the trends of various variables in the production process, and generates daily, monthly, and quarterly reports. Production managers can check the trends according to the actual production situation for assessment and tracking management.

Submerged Arc Furnace

Flue Gas Purification and Dust Removal System

Hani Tech can undertake a variety of dust removal design, manufacture, and installation tasks, such as large-scale closed ferroalloy electric furnace dry gas purification and gas post-treatment system, low-pressure pulse bag filter, positive (negative) pressure large bag filter, and desulfurization and denitrification, etc. The technical indicators of the dust collector have reached the advanced level of similar products at home and abroad, and the control technology is unique. It is suitable for flue gas purification in metallurgy, chemical industry, building materials, electric power and machinery industries.

Closed Electric Furnace Dry Gas Purification device

It is used in various furnace types such as sealed ferroalloy silicomanganese electric furnace, closed high-carbon ferrochrome electric furnace, closed high-carbon ferromanganese electric furnace and closed calcium carbide furnace. The control of the purification system mainly completes the automatic adjustment of the furnace pressure, gas temperature and gas pressure. The filtration, dust cleaning, pressure relief and explosion protection of the whole system are all automatically controlled by computer. The system is divided into "by-machine", "manual" and "automatic" three working modes. The dust in the dust bin can be regularly transported by the tanker to the sintering system for recycling.

Submerged Arc Furnace

Low Pressure Pulse Bag Dust Collector

The room-cleaning bag filter has the characteristics of large air volume, compact structure, small floor space, less steel consumption, low energy consumption and convenient operation and maintenance. Dust emission concentration ≤ 30mg/m3

Positive Pressure Large Bag Dust Collector

When the electric furnace flue gas purification system is running, the dusty flue gas passes through the air duct and leads to the natural air cooler, which cools the flue gas temperature from 450°C to 220°C, and then enters the preprocessor to remove the large particles of dust and sparks in the flue gas. Remove the carbon particles to prevent burning the bag and improve the taste of micro-silica fume. Then it is pressed into the positive pressure bag filter by the induced draft fan to filter, and the dusty flue gas is filtered by the glass fiber coated filter material and then discharged from the exhaust chamber on the top of the filter. The dust content of the emitted flue gas is lower than the national emission standard (50mg/Nm3)

Submerged Arc Furnace

Low-voltage Reactive Power Compensation for Submerged Arc Furnace

Seven Characteristic Problems that Must be Solved for the Stable Operation of Low-voltage Reactive Power Compensation of Submerged Arc Furnaces

High harmonic electrical characteristics: Transformer excitation and unbalanced load will generate 3rd harmonic, but it will only flow between short nets (delta connection), and will not reflect to the primary side: at the same time, arc smelting will generate 5th harmonic. Therefore, reactive power compensation is installed on the secondary side, and iron core reactors with a reactance rate of not less than 12% and 5.67% are equipped to suppress and partially absorb the 3/5th harmonic, which has a decisive impact on the quality.

The basis for judging whether to install a reactor with a certain reactance rate is: whether the harmonic source load is greater than 20% of the total capacity rather than whether the harmonic content exceeds the standard!

Capacitive electrical characteristics: The relevant national regulations on capacitive loads: that is, the flow rate of the capacitive load fluid must be 1.3 to 2.5 times the rated current. The operating current of a unit of low-voltage reactive power compensation generally exceeds 2000 amperes. It is necessary to increase the cross-section of the carrier fluid to reduce the heat generation of the equipment and increase the stability of the equipment operation.

Although reducing the rated current of the carrier can reduce the cost, the harm it actually brings cannot be ignored.

Surge electrical characteristics: When switching, the capacitive load will generate a higher inrush current than the inductive load, such as the main circuit infinite current reactor, and the switching inrush current can be as high as 350 times in severe cases.

Therefore, most equipment without a certain reactance rate reactor can only use zero-crossing switching for its switching components. If vacuum switching is used, vacuum arc welding will occur; it seems advanced, but it is helpless.

Strong interference electrical characteristics: Since the current of arc smelting reaches tens of thousands or even hundreds of thousands of amperes, a strong alternating magnetic field will be generated on site, which will cause eddy current effects in the closed magnetic conduction circuit, and at the same time affect the starting signal of the electronic switch. lead to misconduct.

This is why many thyristors or silicon controlled rectifiers are used as switching components and are often burned out. Of course, there is also the node power consumption of excessive silicon single crystal (1V voltage drop).

Physical characteristics of vibration: Due to the reaction force and electromagnetic influence of the smelting arc, the site is always in a state of vibration. For low-voltage/high-current mortgage reactive power compensation, the vibration will affect the fastening degree of the carrier fluid connection. If no measures are taken , Vibration will lead to loosening of high current connections and arcing and burning.

A lot of ablation or fire at the connection of the carrier fluid is caused by the loosening of the bolt due to vibration. It seems small, but it is actually extremely destructive. Therefore, an anti-loose design must be adopted for the connection.

Physical characteristics of high temperature: arc radiation/heat dissipation of the circuit body and smoke hood will cause the ambient temperature of the site to rise above 40 degrees Celsius in summer, and at the same time, the low-voltage reactive power compensation equipment itself generates heat during operation, double superposition, if the installation environment temperature and equipment operation are not reduced temperature, the life of the capacitor will be greatly reduced.

The glass transition (failure) temperature of the capacitor film is 80 degrees Celsius. Therefore, it is necessary to adopt comprehensive measures to reduce the working temperature and ambient temperature of the capacitor. In addition to installing a reactor with a suitable reactance rate, enlarging the cross-section of the carrier fluid, and selecting high-quality components, ventilation is also an essential means.

Physical characteristics of dust: Part of the fine dust generated by smelting floats/deposits on site, which affects components, especially switching components. Therefore, low-voltage reactive power compensation must use non-contact or vacuum contactors as its switching components.

Only vacuum or non-contact switches can be used for switching components: if non-contact switches are used, the cooling method can only be water-cooled, such as air-cooled, dust will cover the surface of the radiator, and the heat dissipation effect will be reduced, eventually causing the thyristor or SCR burnout.

Submerged Arc Furnace

Features of Low Voltage Reactive Power Compensation

Operating overvoltage characteristic protection

carrier fluid amplification

Magnetic isolation frame

Fastening bolt anti-loosening design

Overpressure and overtemperature automatic control

Automatic cycle switching control

Self-discharge time protection control

Equipment operating temperature automatic control

Loop double isolation

GG class fuse protection

Mechanical self-maintaining vacuum switching and counting

Automatic, manual, maintenance three-state control

Single capacitor grounding protection and fault handling

Pure dry-type gas-filled silver-zinc film capacitor

Capacitor temperature rise is less than 10K

14%, 7% low noise iron core reactor (F class insulation)

Submerged Arc Furnace

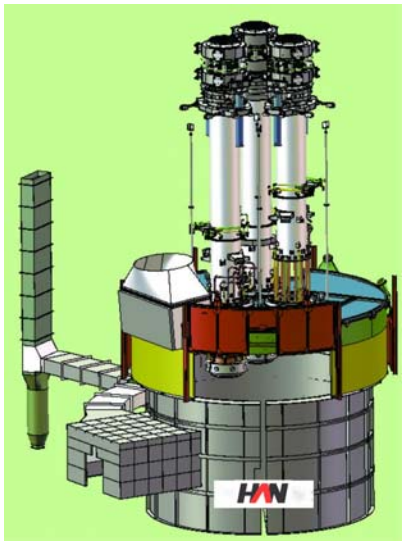
Closed Combination Controller Submerged Arc Furnace

Hani Tech cooperates with scientific research institutes and production enterprises, and develops a submerged arc furnace combination controller on the basis of digesting and absorbing advanced submerged arc furnace technology at home and abroad, which has the following advantages:1. Strong applicability, can be used in submerged arc furnaces with different power and different electrode diameters.2. Due to the airtight design of the conductive element, the conductive element is not affected by high temperature radiation, and its temperature rise is much lower than that of other forms of conductive elements, and the conductivity is significantly improved.3. Due to the reduction of contact resistance, the increase of conductivity, and the internal water cooling, the electrical efficiency and power factor are significantly improved, the energy saving is more than 5%, and the material saving is about 20%.4. Due to the reasonable structure design, the service life of the conductive elements is doubled. The operating rate of equipment is significantly improved, and the daily maintenance cost is greatly reduced.

Submerged Arc Furnace with Charged Progressive Lowering Electrode System

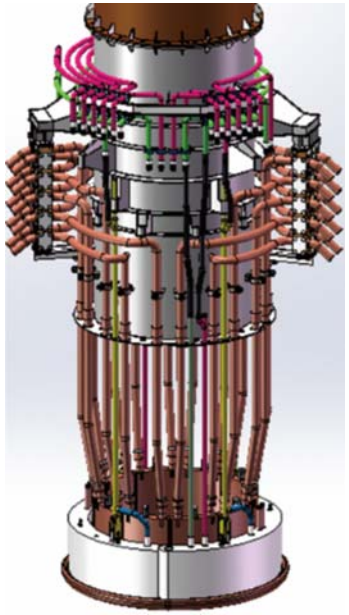
Demark's ferroalloy electric furnace is still a relatively advanced technology in the world, with a sturdy and durable structure and a long service life. Since 1987, we have digested and trial-produced Demark electric furnace equipment, and successfully applied it to the design of ferroalloy electric furnace, achieving satisfactory results, making my country's ferroalloy electric furnace equipment technology reach the international advanced level.

In recent years, through the digestion, trial production and transplantation of Demark electric furnace, the core technology of Demark electric furnace has been mastered, which greatly reduces the manufacturing cost and is more suitable for the production of domestic ferroalloy products.



Submerged Arc Furnace

Combined Controller Lower Part



Lower Part of Copper Combined Controller

Upper part of Plunger Cylinder Combined Controller

Upper part of the Vertical Cylinder Combined Controller

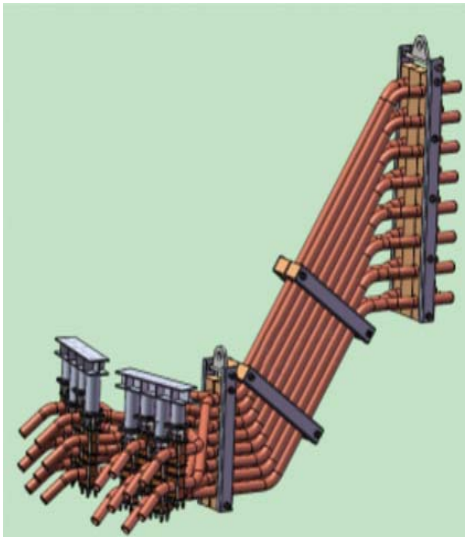
Low-voltage Conductive Part of Submerged Arc Furnace

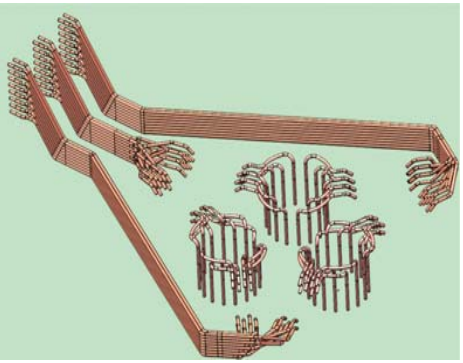
Short Network

The submerged arc furnace short network is a large current line from the secondary side of the transformer to the electrode. Generally, it refers to the hard busbar part, which is divided into two types: copper tube type and copper bar type. The tube-type short network is mostly used now. The advantages of the tube-type short network are:

①The short net and the copper tile can be connected in series to form a waterway. The cooling waterway is: short net→water-cooled cable→conductive copper tube→copper tile→conductive copper tube→water-cooled cable→short net→phase-modulated water-cooled cable→transformer tubular outlet tube→ Phase-modulated water-cooled cable→short network, then discharge.

②Because the short net can be cooled by water, the current density of the short net and the water-cooled cable is increased several times, and the weight of the short net is greatly reduced.





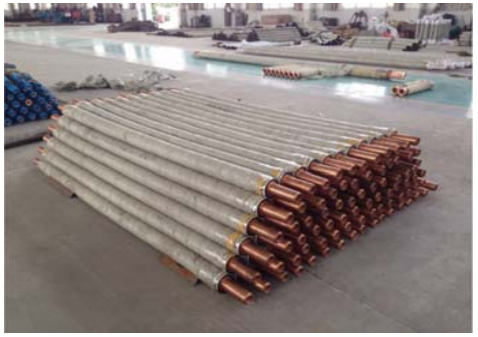
Auxiliary Equipment

Water-cooled Cables and Water-cooled Compensators

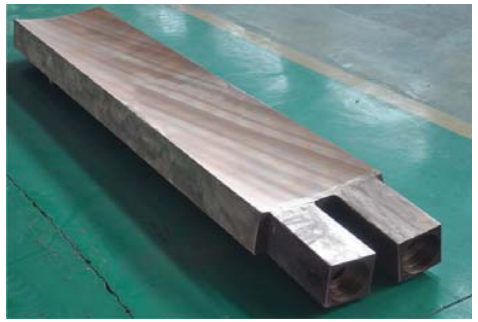
It is used for the connection between the secondary outlet copper tube of the electric furnace transformer and the short-circuit copper tube of the electric furnace. It can compensate installation error, heat expansion and contraction, and absorb the vibration caused by the electromagnetic force of the short net. This piece can also be used in steelmaking electric arc furnaces.







Direct Cooling Copper Forged Copper Tile

Auxiliary Equipment

Process Flow of Copper Stranded Wire Processing and Production:

Raw Material 3mm copper wire → Single copper wire → Single strand copper wire →
Stranded copper wire Finished → Copper stranded wire



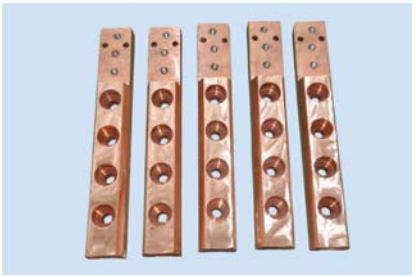


Auxiliary Equipment

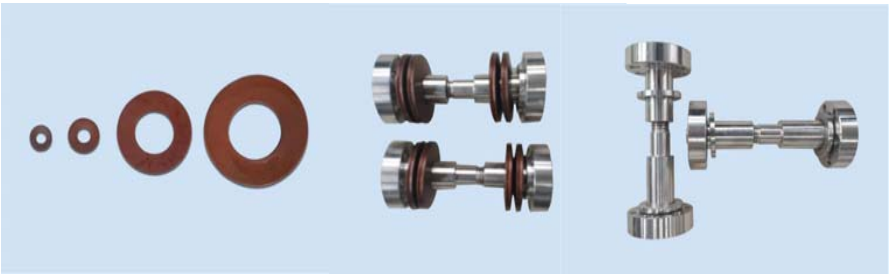
Other Conductive Components

Connection Sleeve

Contact Element



Stainless Steel Adjusting Bolt
Various Disc Springs



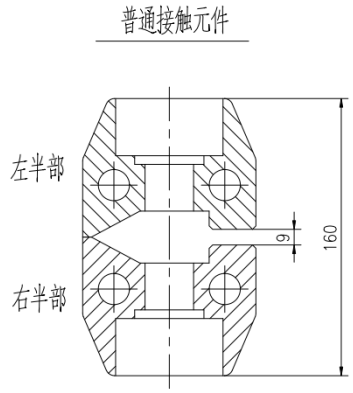
Auxiliary Equipment

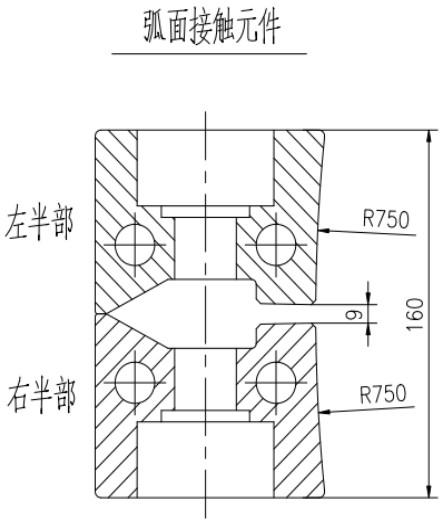
Arc Surface Contact Element

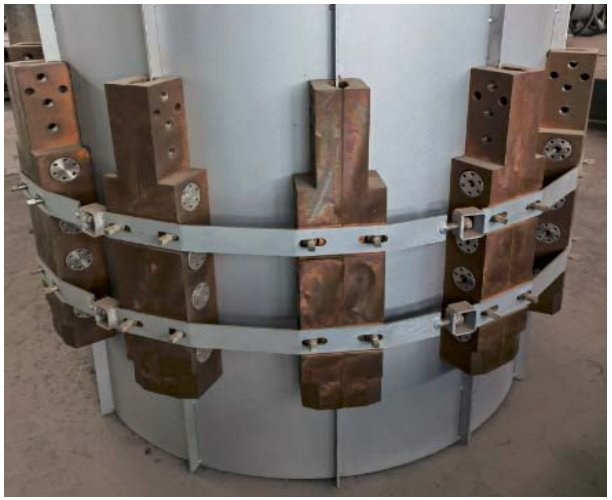
Arc surface contact element specification: L=735mm+arc surface (ordinary contact element specification: L=635mm)

Advantages: increase the conductive area of the contact element, and solve the problem of burning ribs of ordinary contact elements.

Suggestion: For all users who use ordinary contact elements, it is suitable to use the patented technology of arc surface contact elements.



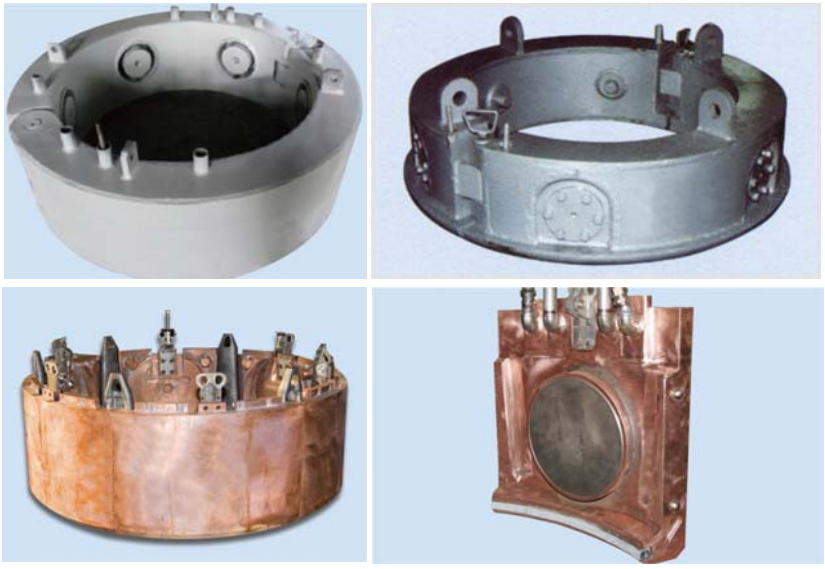




Auxiliary Equipment

Pressure Ring

The pressure ring of submerged arc furnace mainly adopts three categories: cylinder type pressure ring, bellows type pressure ring and disc spring type pressure ring. Among them, there are two types of bellows type pressure ring: built-in type and external type. Its advantage is that it can realize one-to-one radial tightening of copper tiles, without being affected by electrode inclination and surface quality, so that the pressure between copper tiles and electrodes is uniform, and it is not suitable to produce bias current, so as to improve the service life of copper tiles and facilitate Realize PLC automatic control live voltage discharge. More effective maintenance and prevention of electrode accidents.



Copper Pressure Ring

Production: Forged with T2 copper-silver alloy material.
Uses: Suitable for submerged arc furnaces with large bellows pressure ring grippers.
Advantages: The bottom ring and the pressure ring are integrated, the structure is compact and reasonable, the cooling effect is good, and the service life is long.

Auxiliary Equipment

Cast Bottom Ring

Production: Casting with T2 material.

Uses: Mainly used for the bottom ring of the combined electrode holder.

Advantages: good cooling effect.

Disadvantages: Due to defects such as air holes and sand holes in the casting process, it is easy to cause water leakage at the bottom ring.

Auxiliary Equipment

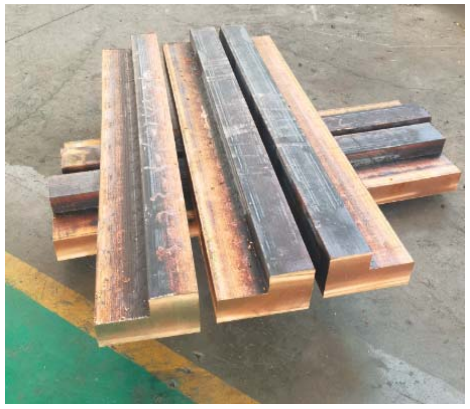
Forged Bottom Ring

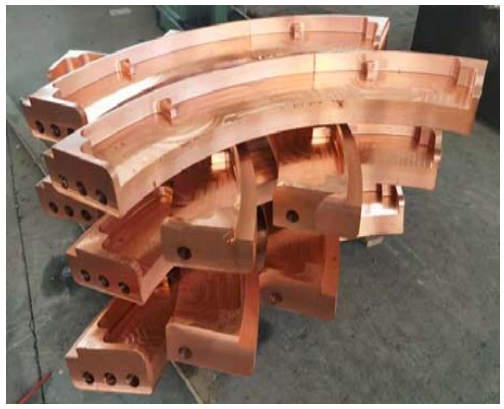
Production: Forged with T2 material.

Application: Applicable to the bottom ring of all bellows pressure ring holders and combined electrode holders.

Advantages: good cooling effect, high material density, no defects such as pores and sand holes, and long service life.

Suggestion: cast bottom rings are being phased out and will slowly fade away from the stage of history. The forged bottom ring adopts a new technology and is processed and formed by CNC machining center equipment at one time, which not only ensures the product accuracy and quality, but also meets the user's requirements.






Auxiliary Equipment

Protective Case

As an important protective component, the protective sleeve is often prone to burnout under high temperature conditions. Considering the equipment stability and energy-saving effect, it is better to use copper protective sleeve. The copper protective sleeve is made of forged copper billet through cold processing, and the layout of the circulating waterway is reasonable. In addition, the T2 copper has good thermal conductivity and good magnetic insulation performance, and the service life is more than eight years. The initial investment cost is relatively high, which has incomparable advantages. The spiral waterway integrated stainless steel protective sleeve designed and developed by our company can also be used, which has better performance after long-term use.

Holding Brake

The function of the holding brake is to hold the electrode (electrode shell) tightly to realize the pressing and pulling out of the electrode. There are various forms, mainly including air bag brake, single cylinder brake, hinge brake, disc spring cylinder brake.

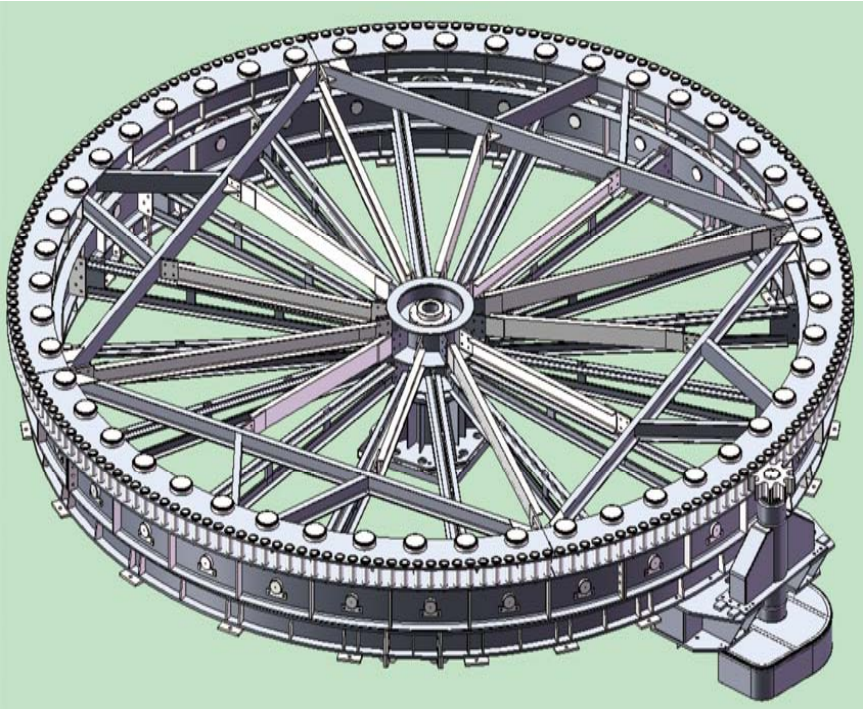
Auxiliary Equipment

Water-cooled Protective Cover
Water-cooled Protective Screen

Water-cooled Furnace Cover

Auxiliary Equipment

Rotary Furnace Mechanism

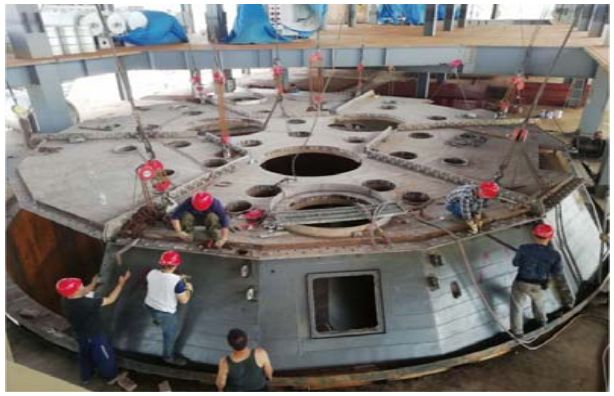


Localized DDS Pounding Furnace Feeding Car

Submerged Arc Furnace Project Construction

Manufacture and Assembly of Large Airtight Submerged Arc Furnace Cover Factory

On-site Installation of Large Airtight Furnace Cover



Large all stainless steel semi-closed furnace cover factory production and assembly

Submerged Arc Furnace Project Construction

Ferroalloy Submerged Arc Furnace

Installation Site of Ferroalloy Submerged Arc Furnace

Submerged Arc Furnace Project Construction

Submerged Arc Furnace Flue Gas Purification Construction Site

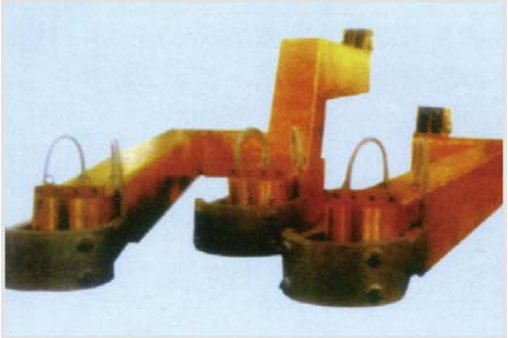
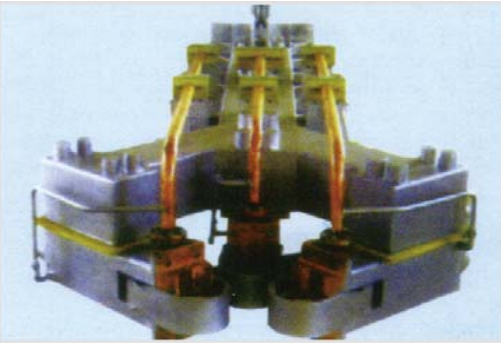
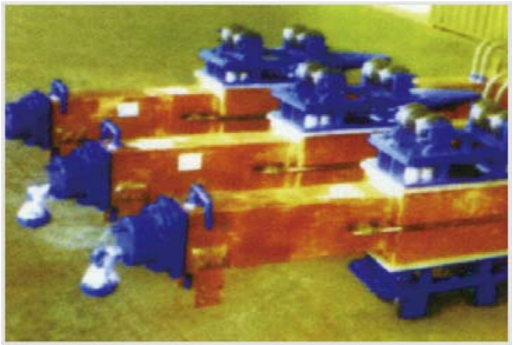
Electric Arc Furnace

Conductive Arm

This series of electric arc furnace water-cooled composite conductive cross-arm has a rectangular beam structure, which is welded by copper-steel composite plates. The outer copper plate is conductive, and the two functions of the electrode cross-arm's conduction and supporting electrodes are combined into one. Due to the cancellation of the conductive copper tube and many insulating links on the traditional electrode cross arm, the structure is simplified, the diversion area is increased, the impedance value and maintenance workload can be greatly reduced, and it can be widely used in 5t-100t electric arc furnaces and large-tonnage ladles Refining furnace.

Features:

1. The product is welded with copper-steel composite plate to form the electrode cross arm, in which the copper layer is used for conduction, and the steel layer is used to support various mechanical forces.
2. There is a water interlayer in the frame of the electrode arm, which is cooled by water and can withstand the burning of the flame of the electric furnace.
3. The electrode is clamped by a butterfly spring, which drives the hoop to hold the electrode tightly, and it is loosened by air or hydraulic pressure. The clamping force is large, and the clamping electrode is reliable.
4. The electrode chuck is made of chrome-copper alloy or copper-steel composite plate, which is water-cooled inside and has a long service life.

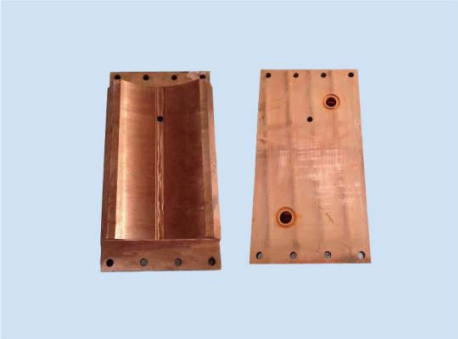





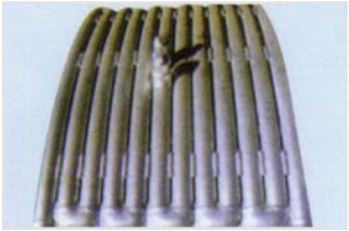
Electric Arc Furnace

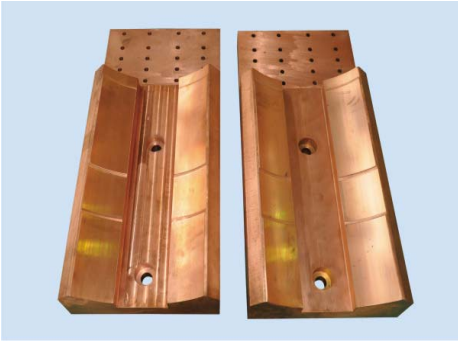
Ladle Burner

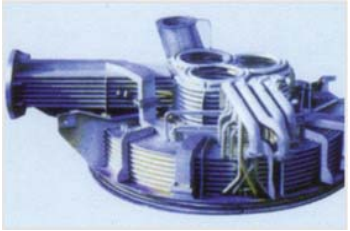
Ladle burner is one of the important links in the smelting production process. Roasting red ladles containing molten steel plays a very important role in improving the internal quality of steel. Baking ladles can make the temperature of the ladle reach about 1100 °C. According to the different fuels used by users, there are different types of diesel burners, producer gas burners, mixed gas burners, and coke oven gas burners for users to choose from.

Electric Furnace Water-cooled Furnace Cover and Furnace Wall









COMPANY CULTURE

Company Culture

Customer First

Continuous Improvement

Advanced Technology

Quality-Oriented

Enterprise achievement - lies in unity and harmony

The strength of the enterprise lies in innovation and surpassing

The enterprise wins -- lies in hard work and struggle

Company Culture

We will pursue excellence in technology and continue to develop and innovate!

To achieve perfection in service, always customer first!

Contact Us

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