



Carefully crafted to serve the world

LuoYang IDM Metallurgy Trading Co., Ltd.

IDM METALLURGY

LuoYang IDM is committed to the development of industries such as smelting and casting equipment in China, and has its own unique advantages in this field. For many years, the company has always prioritized technological research and development, and has carried out a series of upgrades and improvements to its products, enhancing their competitiveness. Currently, we have maintained friendly cooperative relationships with many countries in Central Asia, the Commonwealth of Independent States, South America, and more.


Heat treatment furnace

Melting furnace

Rolling mill


Foundry equipment

 Tangshan City, Hebei Province, China

 www.lyidm.com

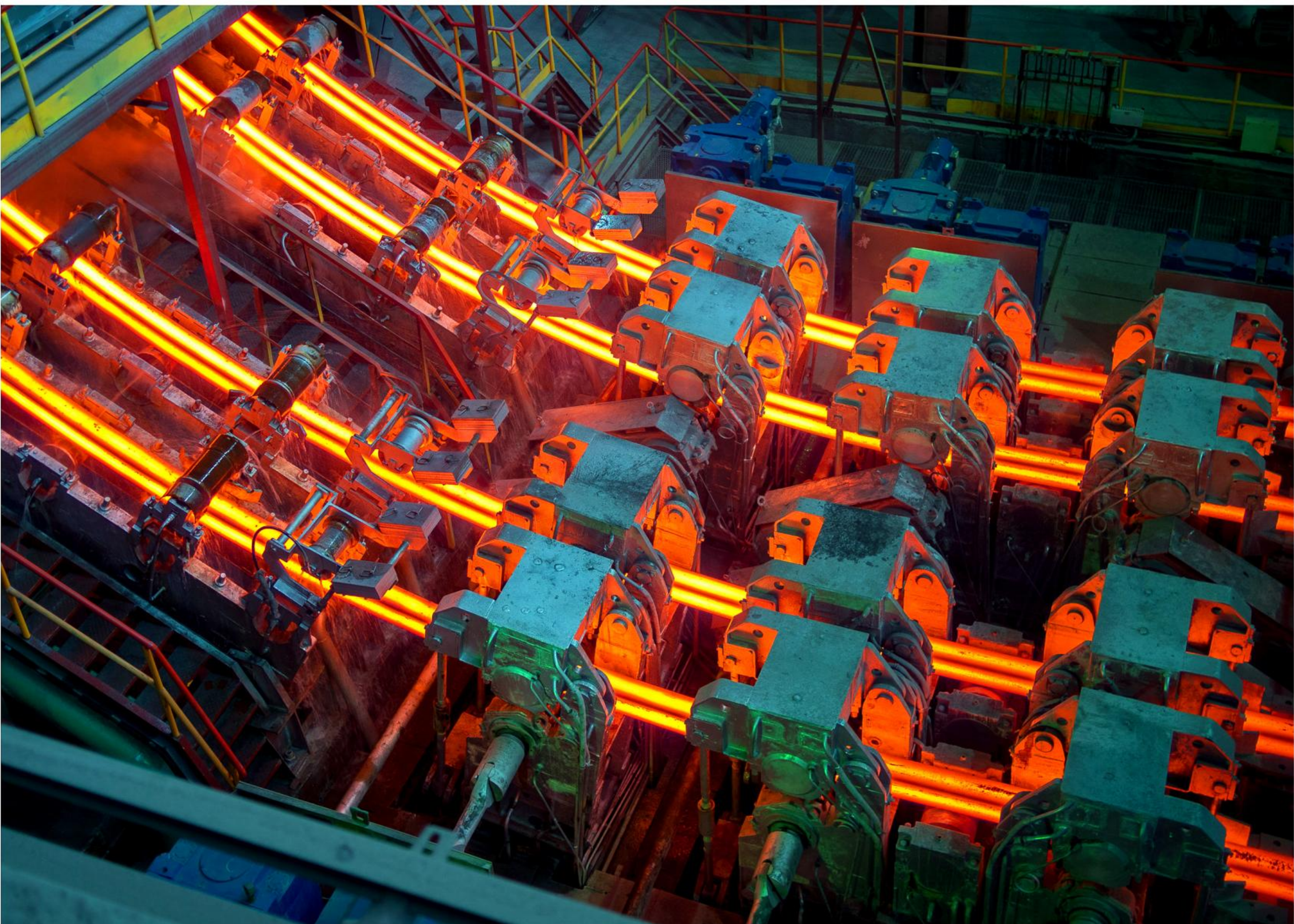
 jack_idm@163.com

 +86-15036707993

 +86-37968291218

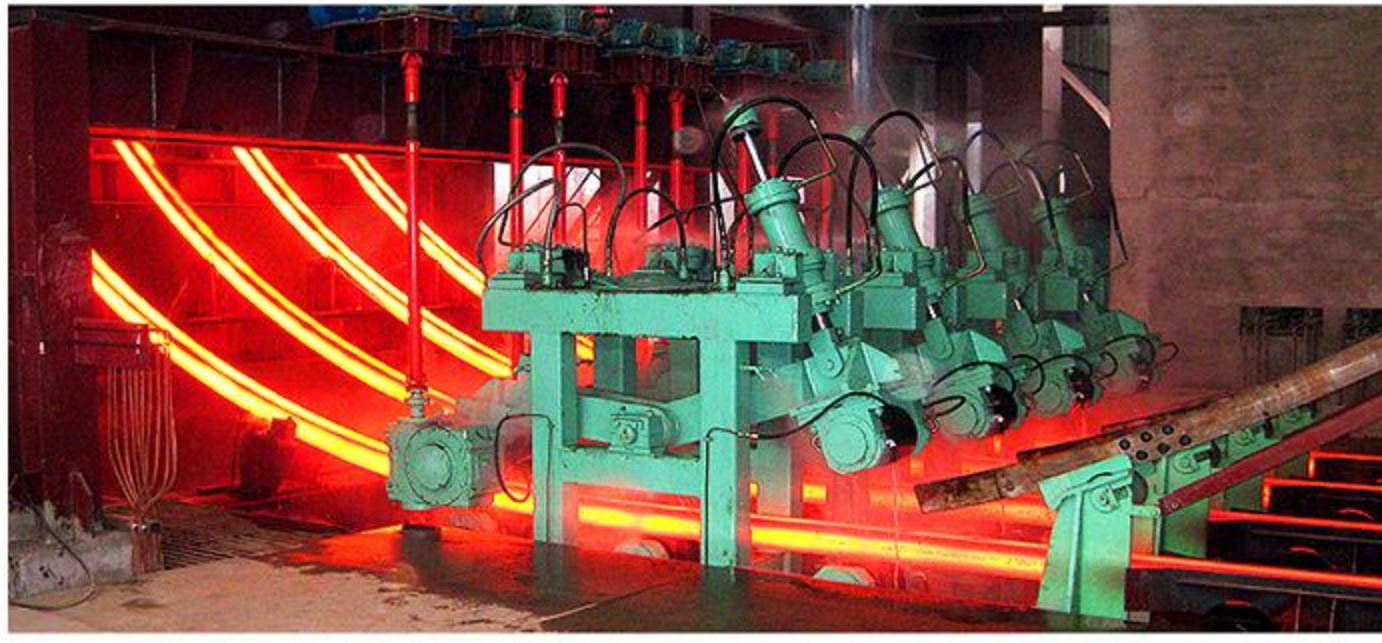
Continuous Casting Machine

The production process of continuously casting high-temperature molten steel into ingots with certain cross-sectional shapes and dimensions is called continuous steel casting. The equipment required to complete this process is called CCM. The electromechanical and hydraulic integration of steel casting equipment, continuous casting machine main body, shear, and billet rod guidance, and conveying equipment constitutes the core equipment of continuous casting machine which is usually called CCM.



What is Continuous Casting Machine

CCM is a manufacturing process in which metal is melted into molten status liquid, and then the liquid metal is poured into a set of condensing equipment. When the metal is partially condensed, a casting of a certain length and shape is pulled out from another section of the condensing equipment. This is a mainstream steel forming method. The equipment used in this manufacturing process is called CCM. Continuous casting machines are widely used, especially in the field of metal rolling. It is an important industrial equipment that plays a significant role in improving production efficiency, reducing production costs, and improving product quality.



Introduction to Continuous Casting Machine

Slurry feeding :

At the head of the continuous casting machine, the molten metal is sprayed into the prepared mold through a specially designed slurry spraying device. At the same time, by combining different elements with slurry feeding, the ingots with different properties can be pre-adjusted.

Billet discharge :

The cast billet is discharged smoothly by the discharge device, and the speed and position of the billet outflow are controlled by the nozzle sealing system to ensure the quality of the billet and no waste. This process needs to be optimized by controlling parameters such as nozzle sealing and discharge speed to keep the billet in a certain shape and quality, while improving production and safety.

Crystallizer :

The billet will gradually solidify during the cooling process in the crystallizer. The crystallizer must evenly transition the billet from a high temperature state to this solid state before the billet solidifies thereby ensuring the length and reducing the billet thickness.

Stretching :

Stretching is achieved through the synchronous cooperation of the wheel set and the stretching machine. During the stretching process, the billet is gradually elongated and gradually reaches the appropriate length and diameter after cooling in water. The purpose of stretching is to make the shape and structure of the billet reach a more ideal state for subsequent processing and use.

Cooling :

Cooling is a very important process to ensure the quality of the billet. By controlling the cooling rate of the billet, the performance and shape of the billet can be effectively maintained. During the cooling process, the continuous casting machine will automatically adjust the cooling water flow to ensure that the billet will not be overcooled and cracks will occur.

High Quality

In the links of liquid level control, online width adjustment non-sinusoidal vibration, secondary cooling water control, online light pressure, etc., all digital control is realized, which improves the accuracy and stability of equipment operation.



Good Performance

The billet shell is cooled evenly and is not affected by the bending and straightening. The cooling, solidification and drawing process of the molten steel can be completed in a relatively short time, which greatly improves the production efficiency.



Product Features

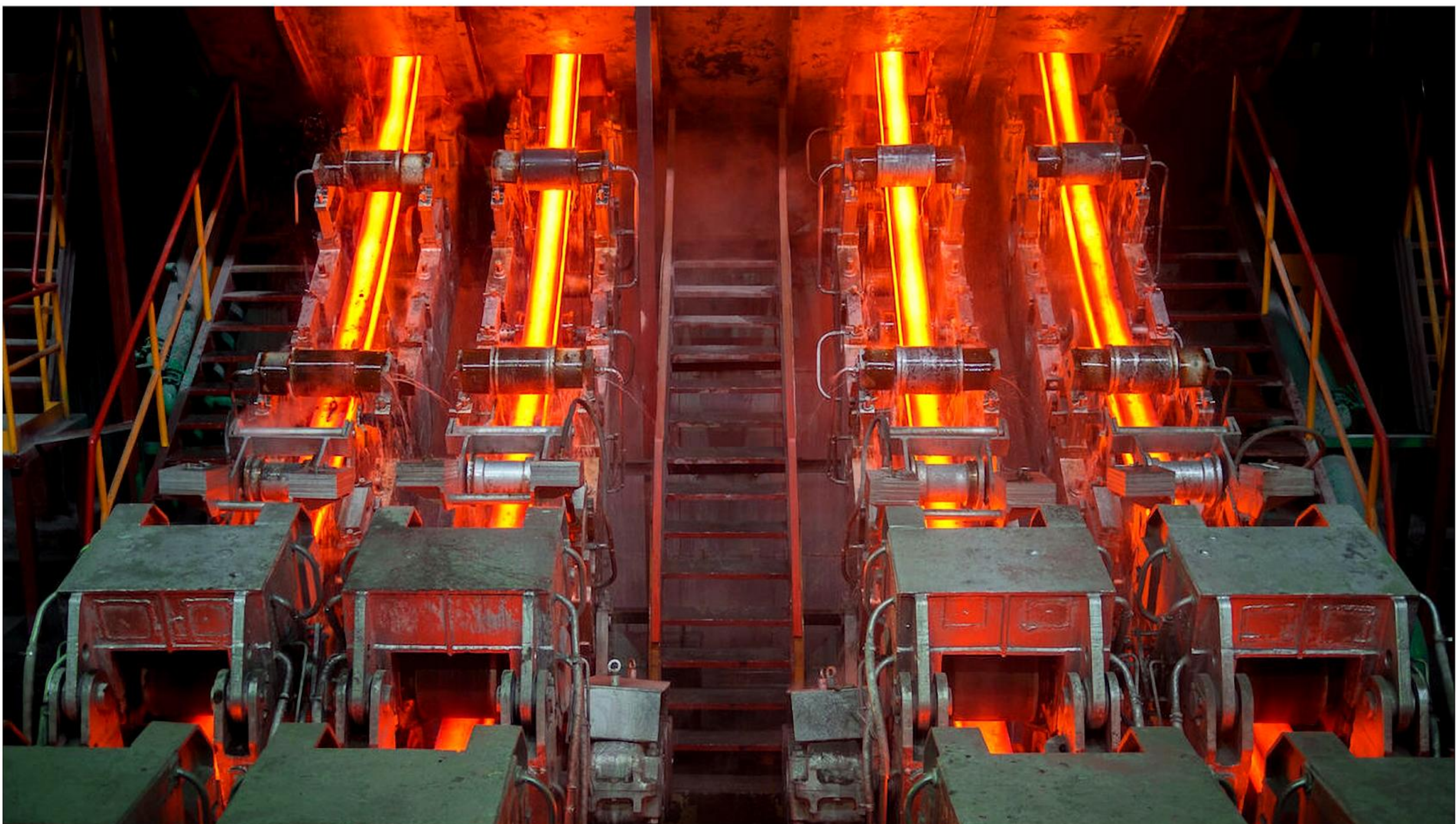
The cooling and drawing speed can be controlled during the solidification of the molten steel to achieve better product quality. At the same time, online detection control and adjustment can be carried out to reduce the defective rate and improve the reliability and durability of the product.

Customized Design

Customized design according to the actual needs of customers.

Working Principle

The molten metal is poured from the furnace into the casting pool of the continuous casting machine. Then, the molten metal is injected into the mold through the gate in the casting pool. In the mold, the molten metal will gradually cool and solidify to form a continuous billet. During the cooling and solidification process, a water cooler is needed to control the temperature of the billet to ensure that the billet is cooled evenly and stably. At the same time, a pulling mechanism is needed to pull the billet so that it can be smoothly separated from the mold to form a complete continuous billet. After the billet is cooled and solidified, it is necessary to remove the scale and molten iron residue on the surface of the billet. Next, the billet will be cut by a cutting machine to form a casting billet that meets the requirements.



Type	Billet size	Productivity	Flow	Cutting way
R2.25	60*60	3T/hour	1	Flame cutting
R3	60*80	8T/hour	1	Flame cutting
R3.5	80*80	10T/hour	2-3	Flame cutting
R4	90*90	20T/hour	multi-flows	Flame cutting
R5.25	100*100	30T/hour	multi-flows	Flame cutting

Heat treatment furnace factory

Factory Introduction

In order to continuously improve the quality of thermal treatment furnace, we have carried out unremitting research in the four aspects of safety, stability, efficiency, and energy saving for many years, and conducted experiments and explorations around the two major topics of reducing power consumption and reducing heat loss. Today, IDM's thermal processing furnace has an excellent performance in terms of product performance, and has established trust with customers from all over the world to meet their needs for high quality products.



Melting furnace factory

Factory Introduction

The development, production and technical upgrade of the intermediate frequency induction furnace and the sensing heating control system is one of the operating projects of IDM Metallurgy Group. The R & D Center is located in Cangzhou City and Factory of Hebei Province, China, and is located in Tangshan City Hebei Province, China. It covers an area of more than 15,000 square meters. It has a complete sales and after-sales service system. The products are sold to more than 70 countries and have been well received by customers.



Rolling mill factory

Factory Introduction

The IDM Metallurgy Group's rolling machine is located in the industrial park of Tangshan City, Hebei Province, China. It covers an area of more than 20,000 square meters. It integrates production, research and development, and sales. The comprehensive strength is among the top domestic industry. In 2016 technical cooperation with many universities in China, in -depth research in the safety and stability of the rolling machine, continuously improved product quality, and won the recognition of customers at home and abroad.



Foundry equipment factory

Factory Introduction

As the core product of the IDM Industrial Group, the casting equipment has a large proportion in the annual export share. Resin Sand Casting Line, Static Pressure Automatic Molding Line, Iron Mold Sand Coated Casting Plant and other equipment were exported to South America Eastern Europe, Africa, and West Asia, and were widely used in automotive, ships, steel, and aerospace and other fields. Mature production technology and thoughtful after sales service are important guarantees for overseas customers to establish a cooperative relationship with IDM.

