



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

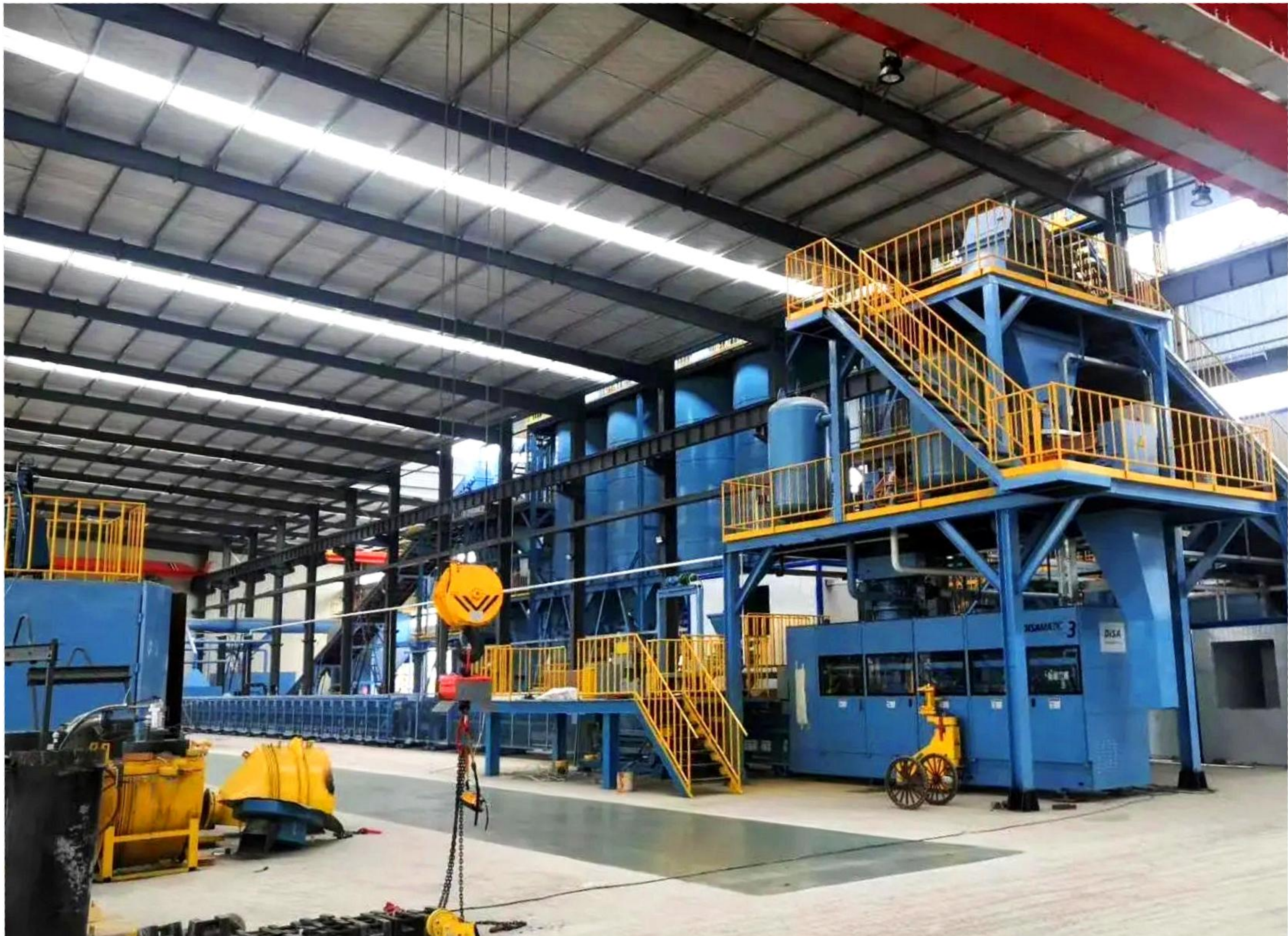
 jack_idm@163.com

 +86-15036707993

 +86-37968291218

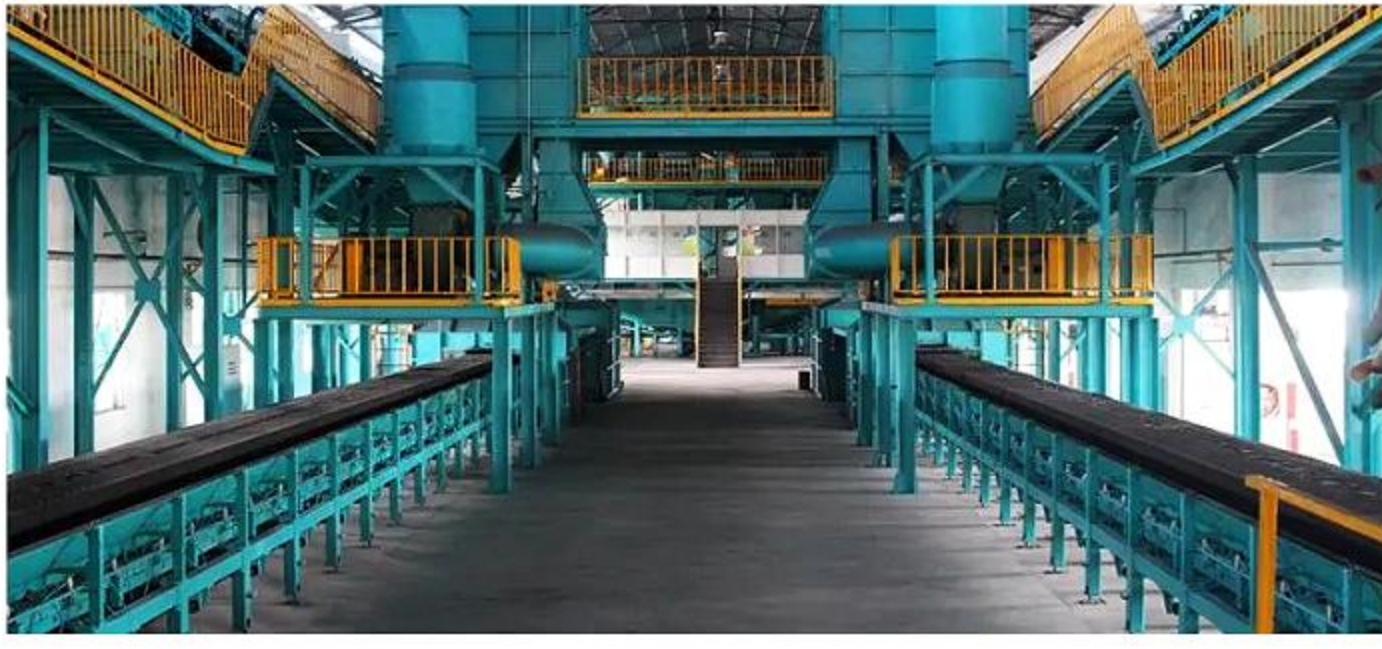
Vertical Parting Flaskless Molding Line

Vertical Parting Flaskless Molding uses a special mold structure during casting so that the casting direction is 90 degrees perpendicular to the stress direction. It can not only greatly improve the compactness and tensile strength of the casting, but also control the cooling speed and prevent the casting defects, so it is widely used in various industrial manufacturing fields.



What is Vertical Parting Flaskless Molding Line

The Vertical Parting Flaskless Molding Line is an efficient and highly automated production method. It is mainly used for the production and processing of high-temperature alloys such as aluminum alloys, titanium alloys, and magnesium alloys, as well as stainless steel, carbon steel and other products. The process flow mainly includes barrel heating, casting mold preheating, mold closing, pouring, cooling, shot blasting and sand removal, grinding, painting and other links. Compared with traditional horizontal casting, vertical casting can better control parameters such as temperature, air pressure and flow rate during the casting process, thereby producing more uniform and more stable quality castings. It is widely used in aviation, aerospace, automobiles, machinery, electronics, petroleum chemical industry and other fields.



Introduction to Vertical Parting Flaskless Molding Line

Strong filling ability

The fluidity and gravity of the molten metal during the casting process are used to make it flow from bottom to top in the vertical direction, so that the gas and impurities inside the casting can be easily eliminated.

Improve the casting quality

The Vertical Parting Flaskless Molding Line can greatly improve the compactness and tensile strength of castings and other performance indicators, thereby making the castings have better quality.

Reduce casting defects

Because the Vertical Parting Flaskless Molding Line can control the cooling rate of the casting, it reduces the occurrence of casting defects, such as holes inside castings.

Reduce production costs

The Vertical Parting Flaskless Molding Line can reduce the generation of scrap castings, thereby reducing production costs and waste of resources.

High Quality

Achieve the high-speed casting, stable casting molding and precise control of material usage and production costs.



Good Performance

During casting, the molten metal flows from bottom to top, and the gas and impurities inside the casting are easily eliminated, thereby making the molding stability of the casting is higher.



Product Features

There is no need to use auxiliary means such as pressure or vacuuming. The metal material can fill the entire casting shape by gravity, which facilitates the production of castings with complex shapes and improves production efficiency.



Customized Design

Customized design according to the actual needs of customers.

Working Principle

Mold preparation

According to the shape and size of the casting, select a suitable mold and apply a layer of release agent inside the mold to prevent the casting from adhering to the mold.

Smelting molten metal

According to the material and quality requirements of the casting, select appropriate metal materials and smelt and adjust them in the furnace to obtain a suitable molten metal state.

Pouring

Pour the molten metal into the mold and wait for it to cool and solidify within a certain period of time. During the pouring process, attention needs to be paid to controlling the temperature and flow rate of the molten metal to avoid defects or deformation.

Cooling and demolding

After the casting is fully cooled, open the mold and take out the casting. At this time, you need to pay attention to the temperature of the casting and the mold to avoid deformation of the casting or damage of the mold due to excessive temperature differences.

Trimming and processing

For some castings that are of unqualified quality or require further processing, subsequent trimming and processing are required to meet the product quality requirements.

Type	Molding room size	Capacity	Sand consumption	Power
	mm	mold/h	t/h	KW
XKZZ416A	600*500	250	12-15	22
XKZZ416B	650*535	300	20-35	42.5
XKZZ417B	700*535	250	20-35	55.5
XKZZ418B	800*600	220	25-40	75

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.

