



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

Aluminum Melting Furnace

Aluminum melting furnace is a new type of high-efficiency and energy-saving furnace that meets the specific requirements of aluminum smelting process, such as strict control of alloy composition discontinuous production process and large single furnace capacity. By adopting high-efficiency and energy-saving technology to achieve low-temperature segmented combustion, the burnout rate is as high as 98%, thereby reducing consumption, reducing burnout, improving product quality, reducing labor intensity, improving labor conditions and improving production efficiency.



What is Aluminum Melting Furnace

Aluminum melting furnace is a melting equipment that uses natural gas as fuel. It heats aluminum materials to the melting point and turns them into liquid, and then manufactures or other processing operations on aluminum alloys. It can be used to produce various aluminum alloy products, such as automotive parts, building materials, aerospace parts, etc. It is widely used in casting and metal processing industries and plays an important role in modern industrial production.



Introduction to Aluminum Melting Furnace

Aluminum melting furnace consists of furnace body, heating elements, insulation materials, control system and other parts.

The furnace body is the main part of the aluminum melting furnace, usually constructed of high temperature resistant materials to withstand the aluminum melting process in a high-temperature environment.

The heating element is the core component of the aluminum melting furnace. There are two ways of heating: resistance heating and gas heating. Resistance heating is to generate heat by passing electric current through conductive materials. Gas heating is to heat aluminum by burning gas to generate high-temperature flames.

The combustion medium of the natural gas aluminum melting furnace is natural gas, which is a clean and efficient fuel that can provide stable combustion effects and high-temperature heat.

The heating temperature of the aluminum melting furnace refers to the melting temperature of the aluminum material in the furnace. The melting point of aluminum is about 660°C , so the heating temperature of the aluminum melting furnace is higher than 660°C to ensure that the aluminum material can be completely melted.

Customized Design

Customized design according to the actual needs of customers.

High Quality

The furnace lining adopts lightweight high-aluminum refractory bricks, the insulation layer adopts aluminum silicate refractory fiber, and the furnace body has strong insulation performance. Semi-gasification composite combustion plus tangential swirl air distribution design low-temperature segmented combustion, and the burnout rate is more than 98%.



Good Performance

The intelligent digital display function can set and correct the temperature. The over-temperature alarm device has functions such as temperature control, over temperature alarm, and automatic power-off protection to ensure the stability of the control system.



Product Features

Clean and environmentally friendly, with high heat utilization rate, it can significantly reduce energy consumption and production costs, and is safe and reliable.



Working Principle

Raw material preparation:

The main raw materials of the aluminum melting furnace are aluminum profiles, scrap aluminum alumina, ingots, etc. These raw materials need to be screened and cleaned before entering the aluminum melting furnace to ensure that there are no debris and pollution.

Heat treatment:

After the raw materials are put into the aluminum melting furnace, they need to be heat treated. This process mainly heats the raw materials to a certain temperature so that they can be melted.

Melting:

When the temperature of the raw materials reaches a certain value, they begin to melt. During the melting process, impurities and bubbles in the melt need to be removed to ensure the purity and quality of the aluminum liquid.

Pouring:

After the aluminum liquid reaches the required purity and temperature, it can be poured. During the pouring process, the pouring speed and temperature need to be strictly controlled to ensure the quality and molding effect of the aluminum liquid.

Type	Chamber Max. Tem.	Capacity	Natural Gas Consumption	Furnace Size
	°C	KG	m ³ /t	mm
ALM-Q/Y15	1150	15000KG	≤ 65	5511*4556
ALM-Q/Y18	1150	18000KG	≤ 65	5851*4696
ALM-Q/Y22	1150	22000KG	≤ 65	6390*4900
ALM-Q/Y25	1150	25000KG	≤ 65	6870*5440
ALM-Q/Y30	1150	30000KG	≤ 65	6300*4400

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.

