

Aluminum and Aluminum Alloy Melting Furnace

Aluminum and Aluminum Alloy Melting Furnace uses aluminum ingots, recovery materials, recycled materials and others as raw materials. It can produce aluminum rod (1 series, 6 series, 8 series), aluminum ingots, aluminum bar and other products;

1. Description

- ➤ The furnace mainly uses aluminum ingots, recovery materials, recycled materials and others as raw materials. It can produce aluminum rod (1 series, 6 series, 8 series), aluminum ingots, aluminum bar and other products.
- According to the customer requirements: sky melting furnace + round holding furnace (for melting), double-chamber melting furnace, rectangular tilting melting furnace, rectangular melting furnace for ingot or bar. Different furnaces have different applications, and see technical parameters table for details.
- Furnace combustion system provides a variety of energy options.
- > Steel structure of furnace has concerned heavy duty load during design. Refractory materials adopts the first class brand to guarantee long service life.
- The furnace adopts regenerative combustion design and PID automatic temperature control. It has higher thermal energy conversion rate, and it could save 20-40% energy than traditional combustion system.
- Furnace adopts HMI+PLC control, centralized monitoring, display. The technological parameters can be read and stored, and the touch screen can be modified directly. It is convenient and efficient.
- It adopts hydraulic drive furnace, laser measurement and control technology, in order to ensure the stable flow control of casting aluminum liquid.

2. Application Demonstration

- It can be equipped with two holding furnaces. Refining and slag-off will complete alternately in the holding furnaces to ensure continuous casting of aluminum water liquid;
- A rectangle furnace can be used for small demand factory. Melting, refining and slag-off will be completed in this furnace. Continue this process when it's empty.
- It equips with aluminum stirring system, online degassing system and filtration system, which can be used to refine the composition of aluminum alloy and degassing and slag removal before casting;
- It can be equipped with continuous casting and rolling line to produce aluminum rod, continuous ingot-casting machine to produce aluminum ingots and bar casting machine to produce aluminum bar;

3. Equipment pictures













4. Technical Parameters

Technical Index	Sky melting furnace + round holding furnace	Double-chamber furnace		Rectangular tilting furnace for aluminum alloy ingot or bar
Material	A00 aluminum ingots, reheat packing material, a small amount of scraps	A00 aluminum ingots, reheat packing material, a small amount of scraps	A00 aluminum ingots, reheat packing material, packaging scraps, waste pole	Packaging scraps, reheat packing material, crushing cast aluminum scrap, lightweight packaging waste
Energy	Natural gas, LPG, heavy oil, diesel, coal gas	Natural gas, LPG, heavy oil, diesel, coal gas	Natural gas, LPG, heavy oil, diesel	Natural gas, LPG, heavy oil, diesel, coal gas



Furnace Type	Vertical cylinder, vertical square tube, round fixed holding furnace	Vertical cylinder/square cylinder Rectangular bottom furnace	Rectangular tilting	Rectangular fixed/tilting
Product	Aluminum rod	Aluminum rod	Aluminum rod, Aluminium bar	Alloy ingots, aluminum ingots, aluminum bar, aluminum plate tape
Capacity	5T/h-10T/h	5T/h-10T/h	10T-35T 7-10T/h	10-100T 4-20T/h

