

Vacuum induction quick melting precise casting furnace



Application:

Vacuum induction quick melting precise furnace is the vertical periodical vacuum induction furnace. It is devoted to the precise casting of high temperature alloy under the vacuum.

Features:

The furnace is composed of furnace body, support, furnace tilting mechanism, vacuum system, medium frequency power supply inductive heater, rotary shaft, water cooling system and electrical control cabinet.

1. Furnace body and cover are dual-shell configuration with the built-in water cooling jacket. Inner layer is stainless steel with the specular polish. Outer layer is high quality carbon steel with the rust-proof treatment. Water is injected into the middle of furnace shell to cool the furnace body. Furnace cover has alloy feeder, rotary viewing hole, temperature gauging device and material beater.

2. Inductive coil is made of rectangle copper pipe rolled into the spiral structure. The crucible is put into the inductive coil (crucible and the material to fix the crucible prepared by the customer). The electric rotary apparatus drives the electrode rotary and makes the crucible casting.

3. Electrical control system is made up of vacuum system and the cover of mold rise and fall system and medium The control system uses IGBT medium frequency power, PLC and digital display touch screen, meanwhile owning RS-485 data interface.

The user is able to control and record the whole process of operation.

4. Vacuum system comprises oil diffusion pump, roots pump, mechanical pump, filter and controlling valves. Using manual or automatic vacuum valves and digital display vacuumometer to achieve the automatic switch between the high and low vacuum.

Main technical parameters:

No.	Model	Melting Power	Crucible Size	Crucible Capacity	Leak Rate	Ultimate Vacuum	Melting Time	Rated Temperature	Evacuating Time
1	ZGK-4	165KW	Ø50X230mm	4kg	≤3Pa/h	10 ⁻¹ Pa	≤120S	1700℃	≤30S
2	ZGK-8	250KW	Ø80X210mm	8kg	≤3Pa/h	10 ⁻¹ Pa	≤120S	1700℃	≤30S