

## Vacuum atmosphere pressure induction melting furnace



### Application:

Under the condition of vacuum and gas pressure, vacuum induction melting furnace is widely used to melt and cast permanent, nickel base material, high temperature alloy, special steel, rare earth metal, non-ferrous metal and precise alloy under the condition of vacuum or the protective atmosphere. Also applicable to the refining treatment of metal material.

### Features:

The furnace can be used to melt the metal under the condition of vacuum and gas pressure.

The furnace is vertical or horizontal structure, composed of furnace body, support, furnace tilting mechanism, vacuum system, medium frequency power supply 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. 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	Rated power	Max. temperature	Capacity	Leak rate	Final vacuum	Gas-in pressure	Medium power
1	ZGP-10	60KW	1700°C	10kg	≤4Pa/h	2Pa	≤0.5MPa	KGPS or IGBT
2	ZGP-25	100KW	1700°C	25kg	≤4Pa/h	2Pa	≤0.5MPa	KGPS or IGBT
3	ZGP-50	100KW	1700°C	50kg	≤4Pa/h	2Pa	≤0.5MPa	KGPS or IGBT
4	ZGP-100	160KW	1650°C	100kg	≤4Pa/h	2Pa	≤0.5MPa	KGPS or IGBT