1.Laboratory vacuum induction melting furnace Laboratory instrument

Application：

It is applicable to scientific research & production unit to melt and cast nickle-base alloy, special steel, precise alloy, high temperature alloy, rear earth metal, neodymium iron boron and magnetic material etc.

Features：

1.It is made up of furnace door and its opening closing device, furnace body(including casting chamber), furnace stand, inductor, tilting casting apparatus, vacuum system, medium frequency power and electrical control system.

2.Alloy feeder, rotary viewing window and temperature measuring device are installed on the furnace body. Furnace door is joined with furnace body by the hinge.The door is opened or shutted by means of the handle.

3.Rectangle copper pipe is wound into the spiral indcutive coil. The crucible is put into the coil.When the casting, turning hand lever installed outside of the furnace to get the electrode rotated to tilt the crucible to cast.

4.Vacuum system is composed of diffusion pump, mechanical pump and vacuum valves. Using pneumatic or manual vacuum valves and digital display vacuum gauge to automatically switch the lower to higher vacuum. Power equipped with IGBT medium frequency power supply system.

Main parameters：

No.	Model	Rated power	Max. temperature	Capacity	Leak rate	Final vacuum	Medium power
1	ZG-1	15KW	1700℃	1kg	≤3Pa/h	10^{-3}Pa	KGPS or IGBT
2	ZG-3	30KW	1700℃	3kg	≤3Pa/h	10^{-2}Pa	KGPS or IGBT
3	ZG-5	45KW	1700℃	5kg	≤3Pa/h	10^{-2}Pa	KGPS or IGBT
4	ZG-10	60KW	1700℃	10kg	≤3Pa/h	10^{-2}Pa	KGPS or IGBT
4	ZG-25	100KW	1700℃	25kg	≤3Pa/h	10^{-2}Pa	KGPS or IGBT

2.Vacuum induction melting furnace Industrial equipment

Application:
Vacuum induction melting furnace is widely used to melt and cast permanen, 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 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 vacuometer to achieve the automatic switch between the high and low vacuum.

Main technical parameters:

No.	Model	Rated Power	Max. Temp.	Crucible Capacity	Leak Rate	Ultimate Vacuum	Medium power
1	ZG-50	100KW	1700℃	50kg	≤3Pa/h	10^{-3}Pa	KGPS or IGBT
2	ZG-100	160KW	1700℃	100kg	≤3Pa/h	10^{-2}Pa	KGPS or IGBT
3	ZG-200	250KW	1700℃	300kg	≤3Pa/h	10^{-2}Pa	KGPS or IGBT
4	ZG-300	350KW	1700℃	500kg	≤3Pa/h	10^{-2}Pa	KGPS or IGBT
5	ZG-500	500KW	1650℃	1000kg	≤3Pa/h	10^{-2}Pa	KGPS
6	ZG-1000	750KW	1650℃	1500kg	≤3Pa/h	10^{-2}Pa	KGPS
7	ZG-1500	750KW	1650℃	2000kg	≤3Pa/h	10^{-2}Pa	KGPS