Model No. HS-GS8

Standard Granulating Machine for Precious Metals
User Manual

Specilized in precious metals and new materials casting

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Content

Respected user:

Hello! Thank you for choosing the granulating equipment produced by Shenzhen Hasung Precious Metal Equipment Technology Co., Ltd. Our company specializes in designing and manufacturing various precious metal equipment and new materials casting equipment for customers. In order to give full operation to the excellent performance of our equipment to serve your company's production and service, please be sure to read the product manual carefully before operation and use, strictly abide by the safety precautions, and set the technical parameters in accordance with the specifications to operate the equipment. If you have any questions, please contact our customer service in time, we will serve you wholeheartedly! Our machines enjoy the best quality and technology in this industry in China.

Please keep all the manuals and related technical data for reference at any time!

Safety Precautions :

Always follow the safety precautions during the production process to prevent accidents and potential dangers!

1. Please appoint professional worker to train for maintenance and operate equipment.
2. Find the problem and solve it in time, and don't make the equipment work with illness.
3. When working with outsourcing equipment such as pressure air pumps, vacuum pumps, etc., please ensure that it is safe and reliable.
4. It is necessary to wear labor protection equipment before operation to ensure personal safety and health.

Danger:

*A reliable grounding wire must be used alone, otherwise there is a danger of electric leakage or static electricity!

*It is strictly forbidden to adjust and touch when each station is running, otherwise there is a danger of being involved in cutting off!

*It is forbidden to touch high-temperature parts (such as crucibles) after they are energized and heated, otherwise there is a danger of burns!

*Keep the gas path and exhaust unobstructed, otherwise there is a danger of air tube exploring! The machine needs air compressor to lift graphite stopper when starting casting.

1. Device Description

2. 1-1 Equipment Usage

1. Using German IGBT heating technology, automatic frequency tracking and multiple protection technologies, it can be melted in a short time, energy saving and environmental protection, and high work efficiency.
2. Using Mistake Proofing (anti-fuck) automatic control system, the operation is simpler.
3. Using PID temperature control system, the temperature is more accurate (±1 °)
4. HS-GS granulation equipment is independently researched and developed and manufactured with advanced technology. It is specially used for smelting and casting of gold, silver, copper and other alloys.
5. This equipment uses well-known brand components at home and abroad; owns independent intellectual property rights, declares utility model patents, invention patents and other national patent technologies!
6. The machine is simple to operate, easy to maintain, safe in production, reliable in quality, and highly adaptable. It is an indispensable first choice for foundry manufacturers, universities, scientific research units and other related industries such as precious metals and alloys and other electronic materials and high-purity special wires. One of the equipment.

1-2 Technical parameters

Power supply voltage: AC 380 V, 60Hz 3 phase
Output power: 0-15 KW (can be adjusted)
Melting metals: Gold, silver, copper and other alloys
Maximum capacity: 8Kg (Au); (4kg, 20kg, 30kg, 50kg is available for choices.)
Cooling water source: Running water/water chiller;
Water cooling pressure 0.2-0.4Mpa; water temperature 18-26 degrees;
Equipment dimensions: 1100x1020x1345mm
Equipment weight: approx. 180 kg

1-3 Installation

When installing the equipment, pay attention to adjusting the height of each foot to keep the equipment level. The installation site should pay attention to the necessary space for equipment operation, maintenance and repair. (Please refer to the equipment layout drawing). Note: The cooling water must be connected to spare water to prevent damage to the equipment due to water or power outages.

1—4 Maintenance

1. Keep the equipment clean every shift, and the rotating part can rotate flexibly.
2. Regular replacement of consumable (replace crucibles, graphite stopper, thermocouple, heating coil when it's almost gone.)
3. Keep the control box clean. (Clean once every 30 days).

2. Operation instructions

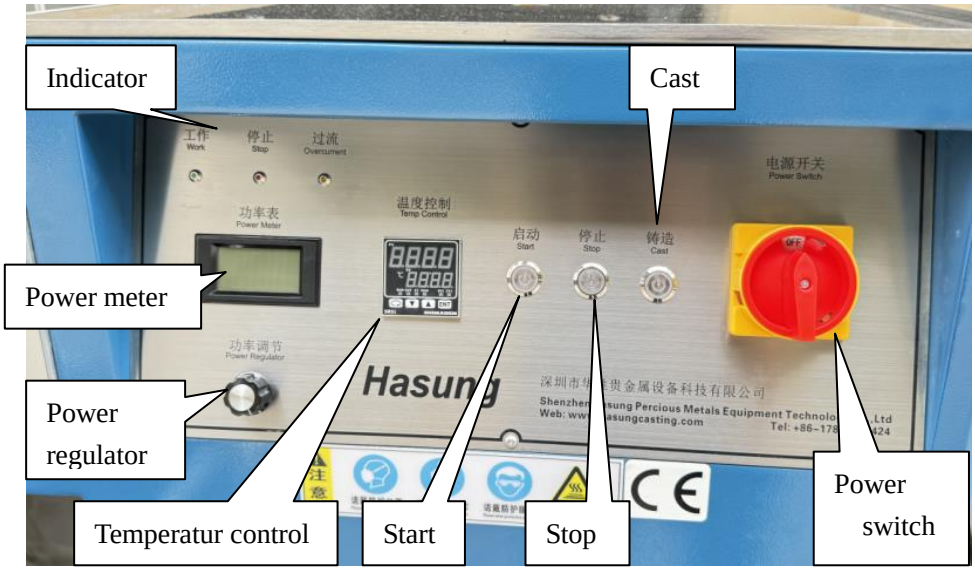
2－1 Preparation for operation

1) 1) Please turn on the main power switch.
2) 2) Please turn on the operation power switch (disconnect switch).
3) Note: After turning on the operating power, the power indicator will be on to remind you to power on.
4) 3) Check the cooling water switch and turn on the cooling system.
5) 4) Turn on the compressed air switch.
6) 5) Adjust the pressure of the air source processor to 0.2-0.4Mpa.

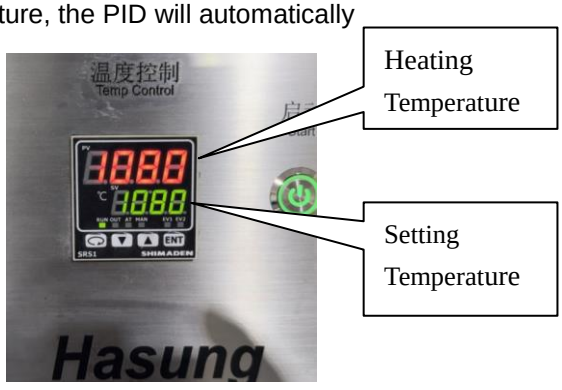
2－2 Operation

2－2－1 Steps

1) Check whether the power supply, cooling water circuit, compressed air and argon gas are normal.



1) Put the crucible into the heating coil and aim at the outlet.
2) Align and place the stopper.
3) Put the metal material to be melted into the crucible.
4) Put on the lid of the melting chamber.
5) Set the required temperature, and then press heating to start. When the temperature reaches the set temperature, the PID will automatically maintain a constant temperature.



6) Set the required temperature, and then press heating to start. When the temperature reaches the set temperature, the PID will automatically

maintain a constant temperature.

8) Take out the casting grains.

9) Shutdown: After the casting is completed, the cooling water will continue to run until the temperature drops below 100 degrees, and then shut down everything, turn off the water, electricity, and gas main switches and valves.

2－3 Instructions

2－3－ 1 Power supply

It lights up when the control switch is turned on, and the power meter displays. At this time, the power supply and the switching power supply are connected.

2－3－ 2 Preparation for operation

After pressing the work start button, the work indicator light is on, and when the work is stopped, the work indicator light is off.

2－3－ 3 Overheated

When the equipment cooling water is not turned on or the flow rate fails to meet the requirements, the overheat indicator light will be on; when it is normal, the work indicator light will be on.

2－4 Dismiss alarm instruction

1) Please turn on the equipment cooling water switch.

2) Confirm the cooling water flow and pressure.

3) Confirm whether the compressed air and inert gas are turned on.。

2－5 Safety operation instructions

2-5-1 Matters needing attention before operation

1) Please confirm whether the water, electricity and gas connections are correct.

2) Please confirm whether the crucible is correct.

3) Please confirm whether there are foreign objects on the equipment.

4) After confirming that it is normal, start the device.

5) After the equipment is started, please confirm whether the cooling water pressure is normal and whether there is any abnormal sound.

2-5-2 Matters needing attention in operation

1) After turning on the heating switch, do not cut off the water [If you accidentally cut off the water (power outage), you can immediately turn on the backup faucet to prevent the heating coil from burning out].
2) Do not press any buttons or switches other than emergency stop.
3) Without the crucible, heating is strictly prohibited.
4) The work indicator light is off and cannot be heated.
5) The machine cannot be placed in a corrosive workshop.
6) Pay attention to antifreeze in winter to prevent the water pipe from freezing and breaking. 12 liters of antifreeze can be added to the water tank of the ice water machine.
7) The outer dimensions of the melt should be smaller than the mold size to prevent the crucible from exploding when heated.
2-5-3 Matters needing attention at the end of operation
1) After each material production is completed, you must wait until the temperature of the crucible of the machine furnace drops below 100 ℃ before turning off the equipment cooling water;
2) Then please cut off the water source, power source, and air source;
3) Please use our company's special mold. Change the size of the mold without authorization, and damage the machine at your own risk.

3. Instrument meter instructions

3-1 Temp controller

1) Temperature setting: refer to the setting video

Factory inspection certificate

Equipment name: Granulating equipment Equipment model: HS-GS Equipment number: 2020051202

1. Equipment testing

The purpose of equipment testing is to verify the quality and configuration of equipment. The following tests are performed on each device:

A. Device startup

Startup: Switch the power on and off for a single device several times and observe whether it can be started normally each time.

B. Equipment status

With the product manual, check whether the equipment indicator is normal. Record the status of the indicator light.

C. Reducer inspection and function test

Use the tested product (with management software, including software) to check the reducer of the equipment to see if the reducer can be connected and operate the equipment for testing. If the test result meets the product description, it is normal.

D. Physical inspection

Physically inspect the equipment, check the factory model, serial number, place of production, accessories, materials, software, etc., and it is normal that they are consistent with the contract and product description.

E. Visual inspection

Check the appearance of the equipment. Check that the appearance of the equipment should be tidy, the size, shape, symbol design or contract requirements, no obvious color difference, no obvious rust, and the identification is clear and correct.

2.Basic test must be done for every machine.