Electromagnetic heating drying machine

TÓM TẮT

The utility model discloses an electromagnetic heating drying machine, which is used to dry the non-metallic smearing dressings on the surface of magnetic metal, and composed of motor deceleration means, a chain wheel, chain bar bearing transmission of dried matters, bottom pettitoes and an iron core and coils positioned downside of drying means. When the alternating current is connected in the coils, iron cores and workpiece form a closed magnetic circuit. The alternating magnetic field traverses the dried workpiece, enabling the metallic part of the workpiece engender electric whirlpool and heat, thereby providing heat for the volatile evaporation in the dope and dry the smearing dressings on the surface of the workpiece. This machine can improve the heating and drying speed, reducing the volume of the dryer, and without the need of temperature maintenance, thereby reducing the energy consumption.

LỜI XÁC NHẬN

1 Electromagnetic heating dryer reduction mechanism includes a motor, a chain, carrying conveyor chain being of drying, foot, characterized in that it further comprises drying the bottom of the core member and the coil, the electromagnetic coil (3) is E-type core (2), the core (2) at the workpiece (1) below, to form a closed magnetic circuit between the workpiece (1) care in the chain (4), the chain (4) onto the chain (5), the chain (5) pivotally supported at its foot (7) and associated with the motor speed reduction mechanism.

MÔ TẢ

Electromagnetic heating dryer

Technology

The utility model relates to a drying device, particularly a magnetic metal using the eddy current heating dryer.

BACKGROUND

Most of the existing dryer using hot air from the system and through convection heating and drying thereof. Since the heating rate limits, resulting in longer heating times, allowing continuous production equipment, bulky, increased investment in equipment, but also increased difficulty of the operation. Hot air drying device is heat and mass transfer in the binary vector, both to properly exhaust hot humid air to maintain indoor air drying moisture absorption capacity, but also on the drying chamber insulation to reduce heat loss and energy consumption greatly. With this drying device such as a paint drying stencilled plate or bag leather dressing electrode, because the heat transfer from outside to inside, while the volatile matter from the inside out transfer, heat transfer too fast will lead paint or surface coating crusts, thereby enabling the paint or cracked leather bag dressing seriously affected by drying the surface quality of steel plate or rod.

SUMMARY OF THE INVENTION

In order to improve the operational reliability of the dryer, reducing equipment investment and energy consumption, the utility model provides an electromagnetic heating dryer for drying the surface of the metallic magnetic metallic coating materials.

The utility model is realized through the following technical scheme: Electromagnetic heating and drying machine comprises a motor reducer mechanism, transmission chain, carrying conveyor chain being of drying, foot, further comprising drying the bottom of the core and the coil member.

This has the beneficial effect is due to the heat transfer and mass transfer in the same direction, greatly improving the heating and drying rate, thus reducing the dried material in the dryer residence time, reducing the volume of the dryer. Since the electromagnetic heating and drying machine is no longer in the air as a heating medium, the drying machine without insulation, thus greatly reducing energy consumption.

BRIEF DESCRIPTION

Figure 1 is a schematic diagram of electromagnetic heating dryer. Figure 1. Workpiece 2 core, 3. Coil, 4. Chain, 5. Sprockets, 6. Motor gear box, 7 foot.

Specific embodiments

Coating the surface of non-metallic material permeable metal parts (1) placed on the chain (4), the electromagnetic heating dryer deceleration of the motor mechanism (6) mounted on the end of drive pin (7) on the chain (5) , and then mounted on the chain drive (5) on the chain (4) uniform forward taken the workpiece outlet from the inlet. When the coil (3) through the alternating current, the core (2) and workpiece (1) composed of a closed magnetic circuit, the alternating magnetic field passing through the workpiece to be dried, the workpiece (1) of the metal parts produces eddy current and heat, the evaporation of volatiles in the paint to provide heat, so that the surface of the coating material to be dried quickly.

As shown, wherein the electromagnetic coil (3) is E-shaped core (2), the core (2) at the workpiece (1) below, to form a closed magnetic circuit between the workpiece (1) care in the chain (4) on the chain (4) sets the sprocket (5) on the sprocket (5) pivotally supported at its foot (7) above, and with the motor speed reduction mechanism linked.