ELECTROMAGNETIC DRYING HEATING EQUIPMENT

TÓM TẮT

The invention discloses electromagnetic drying heating equipment, which comprises a frame. Both ends of the frame are respectively provided with left and right gears. The left and right gears are sleeved with transmission belts which carry out circulating transmission. Heaters which are arrayed in lines are arranged on the frame. The heater are all positioned above the transmission belts. Each heater comprises a bottom plate and an upper cover covered on the bottom plate. An air duct is formed between the upper cover and the bottom plate in a surrounding mode. The bottom plate is fixedly provided with glass ceramics. A plurality of coil panels which are connected in series or in parallel are arrayed on the glass ceramics. A magnetic block is respectively adhered on the upper surface of each coil panel. The electromagnetic drying heating equipment has the advantages of high working efficiency, good drying effect, long service life and the like.

LỜI XÁC NHẬN

1. An electromagnetic heating drying device, comprising a chassis, mounted with both ends of the left and right gears, said left and right gear set with circulating belt drive, characterized in that: said frame is mounted on a heater arranged in rows, the heater is located above the belt; each heater includes a base and a cover on the bottom plate cover, said cover and base plate are enclosed between the air duct; fixed on said base plate installed glass, crystallized glass arranged on the distribution of a number of coils connected in series or parallel plate, each of the coil plate are affixed on the upper surface of the magnet block.

2. (2) as claimed in claim 1, wherein an electromagnetic heating drying apparatus, wherein: said air inlet duct parts of the installation with the fan, the fan outlet of the duct.

3. 3 according to claim 1, wherein an electromagnetic heating drying apparatus, wherein: said temperature sensor is installed on the heater.

MÔ TẢ

An electromagnetic heating equipment Drying

Technical areas:

[0001] The present invention relates to an electromagnetic heating drying device.BACKGROUND:

[0002] electromagnetic heating and drying equipment, mainly for various weld tank painted up and drying. Fill the tank after coating is not easy to be corroded weld requirements, this will help save time in canned goods for longer. The traditional way of drying drying line for the gas, electric drying line, but the two drying line has some flaws: gas drying line is mainly dominated by the combustion gas, drying line length is generally six meters, 9 m, 13 m, 18 m, to meet the 120 cans / min, 150 cans / min, 160 cans / min, 180 cans / min, 200 cans / grading, the main drawback is the high economic costs, drying line easy to aging, low thermal efficiency, combustion residues, waste discharge, drying ineffective, fire safety hazards, winter liquefied pot need to preheat treatment and many other shortcomings; electric drying line is mainly dominated by resistance wire heating, drying and gas drying line length the same line, the main drawback is the high economic cost, easy to aging resistance wire, low thermal efficiency, poor drying, external heat radiation and other shortcomings.

SUMMARY OF THE INVENTION:

[0003] The object of the invention is to compensate for deficiencies of the prior art, to provide a high drying efficiency and long life of the electromagnetic drying heating equipment.

[0004] The present invention is achieved through the following technical solutions:

[0005] An electromagnetic heating drying apparatus comprising a chassis, mounted with both ends of the left and right gears, said left and right drive gear set with a belt loop, characterized in that: said frame arranged in rows on the heater is installed, the heater is located above the belt; each heater includes a base and a cover on the bottom plate of the cover plate between the cover and surrounded by a duct; wherein is mounted on the fixed plate glass, crystallized glass arranged on the distribution of a number of coils connected in series or parallel plate, each of the coil plate are affixed on the upper surface of the magnet block.

[0006] An electromagnetic drying of the heating apparatus, wherein: said air inlet duct parts of the installation with the fan, the fan outlet of the duct.

[0007] An electromagnetic drying of the heating apparatus, wherein: said temperature sensor is installed on the heater.

[0008] The present invention utilizes the principle of electromagnetic induction to convert electrical energy into heat, the rectifier circuit 50HZ/60HZ AC converted into DC voltage, and then through the control circuit converts the DC voltage frequency of the high frequency voltage of 20-40KHZ, rapidly changing current through the coil when the coil on the disc will produce rapid changes in the magnetic field, when the magnetic field lines through the tank when the tank body produces countless small vortex flow, the tank itself, self-heating, which play a weld on the tank drying effect.

[0009] The present invention is in the drying process, when the heater temperature is too high, open the fan duct by the blowing fan, and thus a cooling effect.

[0010] The present invention heater is controlled by a control cabinet, control cabinet contains a power supply, switches, terminals, electromagnetic drying movement, metal case and so on.

[0011] The heater is also installed on the display unit and the dynamic adjustment member for the user to use.

[0012] The advantage of the present invention are:

[0013] (a) no open flame, zero emissions, zero pollution, in addition to weld heating, no other heat sources external radiation.[0014] (2) high efficiency, thermal efficiency above 95%. While other drying lines are at 46% or less, a single year, saving equipment costs can be recovered.

[0015] (3) high production efficiency, gas and electric drying line drying line if 180 cans / min, needs at least nine meters long pipeline able to meet requirements, and electromagnetic drying line just 4.5 noodle can meet the needs, and the hourly just 6.7 degrees electricity can, if required for the electric drying line for at least 12.2 degrees electricity.

[0016] (4) the drying efficiency is good, the electromagnetic drying, using electromagnetic eddy current principle, self-generated heat to the tank, to obtain the drying effect, caused by local heating from uneven thermal conductivity or combustion residues affect the drying effect.

[0017] (5) safety, electromagnetic drying with over and undervoltage protection; overheating protection; overcurrent protection; leakage protection; lack of protection and other protection, safe to use.

[0018] (6) long life due to electromagnetic drying device itself without heat, and the use of advanced high-frequency inverter technology, reliable performance, long MTBF.

[0019] (7) easy operation, because using data of the MCU control, human-machine operation is superior, simple and practical. BRIEF DESCRIPTION:

[0020] Figure 1 is a schematic structural diagram of the invention.

[0021] Figure 2 is a front view of the heater.

[0022] Figure 3 is a plan view of a heater.

Specific embodiments:

[0023] An electromagnetic heating drying equipment, including a rack, the rack ends were fitted with a left and right gear, the left and right drive gear set with a belt loop 2 is installed on a rack a heater arranged in the line 3, the heater 3 are situated above the belt 2. Each heater 3 includes a base plate 4 and the cover on the upper cover 5 on the base plate 4, the upper cover 5 and the base 4 are enclosed air duct; said air inlet duct parts of the installation with the fan 6, wherein 6 fan outlet duct on the inside. The base plate 4 is mounted on a fixed glass 7, 7 are arranged on the glass distribution of a number of coils connected in series or parallel plate 8, each of the coil plate 8 are affixed on the upper surface of the magnet block 10.Said heater is mounted on the temperature sensor 3.

[0024] operation, the tank 10 is placed on the belt 2, from the end of the belt 2 is transported to the other end of the belt 2, in the process of being conveyed, continually heated by the heater 3, and then to the tank drying effect on the weld 10.