



Guangdong Hwashi Technology Inc.

HONG KONG CO.: Hwashi Technology (Hong Kong) Co., LTD

DOMESTIC CO.: Guangdong Hwashi Technology Inc.

WEBSITE: www.hwashi.com

EMAIL ADDRESS: sales4@hwashi.com

SERVICE HOTLINE: +86 18933253252

SKYPE: Lilian Tao

WECAHT: t1191964702



Medium Frequency Inverter Welding Power Control System:

In MF inverter welding power control system, the three-phase AC will become DC through the rectifying circuit. Then the DC will become medium frequency square wave to be connected to primary welding transformer through the inverter circuit which is composed of power switching elements. The MF square wave will become small pulse DC to the electrode for welding work piece through the depressurization and rectifying process in the welding transformer. The inverter will adjust the switching of power devices through the feedback secondary current so as to achieve constant current of the welding process.

Compared to conventional frequency controller, inverter medium

frequency controller has the following advantages:

- ✧ The current in secondary welding loop is DC. Dramatically reduce the impact to the welding current due to the inductive reactance in secondary loop when conducting welding to the work piece.
- ✧ Three-phase balanced load can reduce the requirement to the power supply system. The power factor is close to 1. No electrical inductance so no need to adjust the power factor.
- ✧ Eradicate the contamination to the power supply. It is a kind of environmentally friendly welding mode. No need to provide power independently. It is able to be used together with robot welding fixture system.
- ✧ Reduce power consumption, save energy. Reduce the requirement of cables and lots of maintenance cost.
- ✧ The weight of transformer is reduced greatly.

Basic Characteristics:

1.101 sets of programmable welding models, 92 sets of seam welding models. Be able to select the model directly when welding .

2.The function of welding spot current increasing progressively, efficiently solve the instability of welding effect caused by current shunt when doing multiple pints welding.

3.Be able to set the preheat current , welding current and tempering

current , efficiently prevent the splash during the welding and work piece quenching after welding. The 3 electric pulse can be set separately and combine separately or freely.

4.Be able to slowly increase and decrease the current, effectively avoid the splash and defective nugget formation during welding.

5.Be able to welding special material, special for welding aluminum , galvanized metal and so on with ideal welding effect.

6.Counting function , Efficiently count the number of time of welding , number of use of electrode and grinding for better outout calculation and machine management.

7.Function of single spot welding, continuous spot welding.

8.Malfunction checking and self-protecting function , during working process, controller will automatically close the output current and friendly remind the reason of malfunction .

9.Energy saving, three phase power source output, high working frequency, low consumption of transformer, significant effect of saving energy.

10.Convenient installation and operation , In the MF inverter welding equipment , the volume of transformer has been decrease dramatically compared with common AC transformer. The whole machine s light in weight, Convenient installation and operation .

11.Communication and BCD code control function, be able to

connect to industrial PC, PLC and other upper control device so as to achieve remote control , automation management, with higher efficiency.

12. Adopt DSP and PLD as main control unit, The electric circuit is simple , high integrated, intelligent, decrease the rate of malfunction , Easier maintenance.

Technical Parameters:

1. Input Voltage : three phase 380V, 50HZ/60HZ, power source fluctuation +10%/-20%.

2. Output voltage : tow phase PWM output 550V (Adjustable leaving factory)

3. Output current : depend on the model.

4. The maximum value can be set to 65535, adjustable according to real condition.

5. Cooling water: flow 6L/MIN temperature $\leq 28^{\circ}\text{C}$.

6. Working environment temperature: 0-50 $^{\circ}\text{C}$.

7. Air valve specification : AC220/AC110/DC24V