



# **MFDC TECHNOLOGY**

### **Medium Frequency Direct Current (MFDC) Resistance Welding Process**

Using Inverter power supply, the three-phase power grid input is inverted into 1KHZ/2KHZ/4KHZ through inverter, and then input to the medium I/KA frequency transformer to step down the voltage and then rectify again into flow voltage high current.

This inverter power source is applied to the resistance welding machine. Place the welded workpiece between the upper and lower electrodes, and then set the welding current and welding time through the medium frequency inverter resistance welding controller. Set the pressure and current between the electrodes.when the high current is passed through the welded parts, the high temperature generated by the contact resistance to melt the welded base material and form the welding nucleus process. This power source can greatly reduce the demand of the power grid compared to the AC single-phase welding power source.



The Discharge Current Curve The maximum short-circuit current reaches 250KA!

# **MFDC Equipment Series**



**Type H** 110-880KVA









Double-headed

165-880KVA

### **The Advantages Of Heron's MFDC Equipment**



- The MFDC equipment is equipped with diamondshaped guide rail and follower mechanism, which greatly reduces the splash problem in the process of bump welding;
- 2. Fast current ramping up to 30KA within 3ms.

### **Manual Integrated Welding Gun**

### **Product Advantages**

- Professionally manufacturing integrated manual welding guns for more than 20 years, Heron has sold out more than 10,000 guns. Three series( H, L2, L3 ), 2 kinds of power supply(medium frequency and AC), Heron's gun can adapt to a variety of use site;
- 2. Modular design, high standardization;
- 3. Stable product performance and strong supply capability;
- 4. Green manufacturing process, energy saving and emission reduction.



# The Controller Of Manual Integrated Welding Gun

#### **Product Advantages**

1. Developing software and hardware and manufacturing

PCB boards independently.;

- 2. 2 kinds of power controllers: IF and AC.;
- 3. 2 product series, one towing one and one towing two.;
- 4. Stable product performance and strong supply capability.



# **<u>Robotic Welding Gun</u>**

#### **Product Advantages**

1.Specializing in the production of robotic welding pliers for more than 20 years, Heron's robotic welding guns have been used in large quantities in the body manufacturing industry.
2.Has a full range of clamp;
3.Modular design, universal parts are interchangeable;

4.High self-production rate, stable performance and strong supply capability;

5.Green manufacturing process, energy saving and emission.

reduction.













### Welding Gun For Aluminum Alloy

#### **Product Advantages**

- 1. Good rigidity of the welding gun.
- 2. The maximum output current can reach 55KA.
- 3. Adopting 250KVA/2KHZ special aluminum welding transformer with 20% load factor.
- 4. High degree of modularity.



# **Mid-frequency Servo Robot Controller**

#### **Product Advantages**

- 1. Automatic pressure calibration function;
- 2. Five sections of current independently adjustable;
- 3.Step-up function;
- 4. Welding-spot counting function;
- 5. Automatic filler function;
- 6.Electrode resharpening and replacement;
- 7. Automatic current calibration system.









#### **EXPERT IN RESISTANCE WELDING ·CLINCH**



NO.63 Xin Yi Road, Taiping Town, Conghua District, Guangzhou, China









www.heron-metal.com/