

# TS2050C Wire to Busbar Welder



# Ultrasonic Welder

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■ The principle of ultrasonic welding is to convert 50/60 Hz current into 15, 20, 35 or 40 KHz electrical energy through an ultrasonic generator. The converted high-frequency electric energy is converted into mechanical motion of the same frequency through the transducer, and then the mechanical motion is transmitted to the welding head through a set of horn devices that can change the amplitude. The welding head transmits the received vibration energy to the joint of the workpiece to be welded. In this area, the welding effect is formed by making the atomic bonds of the metal reach a certain distance through high-frequency vibration under a certain pressure. Ultrasonic waves can not only be used to weld hard thermoplastics, but also to process fabrics and films. The heat energy comes from the reciprocating movement of one workpiece on the other surface with a certain displacement or amplitude under certain pressure. Once the expected welding degree is reached, the vibration will stop, and at the same time, there will still be a certain pressure on the two workpieces, so that the newly welded part will cool and solidify, thereby forming a tight bond.

## ■ Compared with traditional welding equipment

Traditional equipment: traditional main welding equipment includes resistance welding, laser welding, etc.

The principle of their welding is to melt the material at high temperature to form a weld. After welding, the structure of the material will change, and the electrical conductivity and thermal conductivity of the material will decrease after welding.

Ultrasonic welding: Under the action of ultrasonic waves, the atomic bonds of materials reach a certain distance under a certain pressure to form a welding effect. Ultrasonic welding does not require any solder, the structure of the material does not change after welding, and the electrical conductivity and thermal conductivity of the material after welding are good.

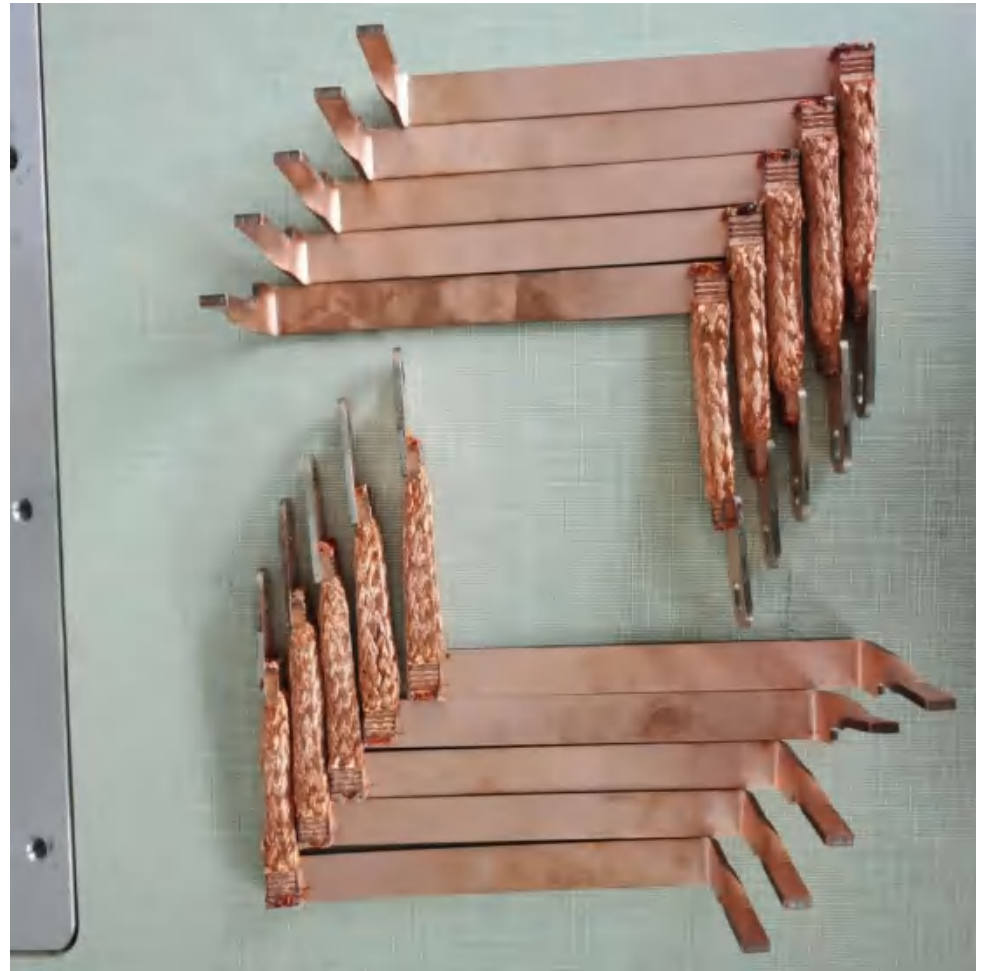
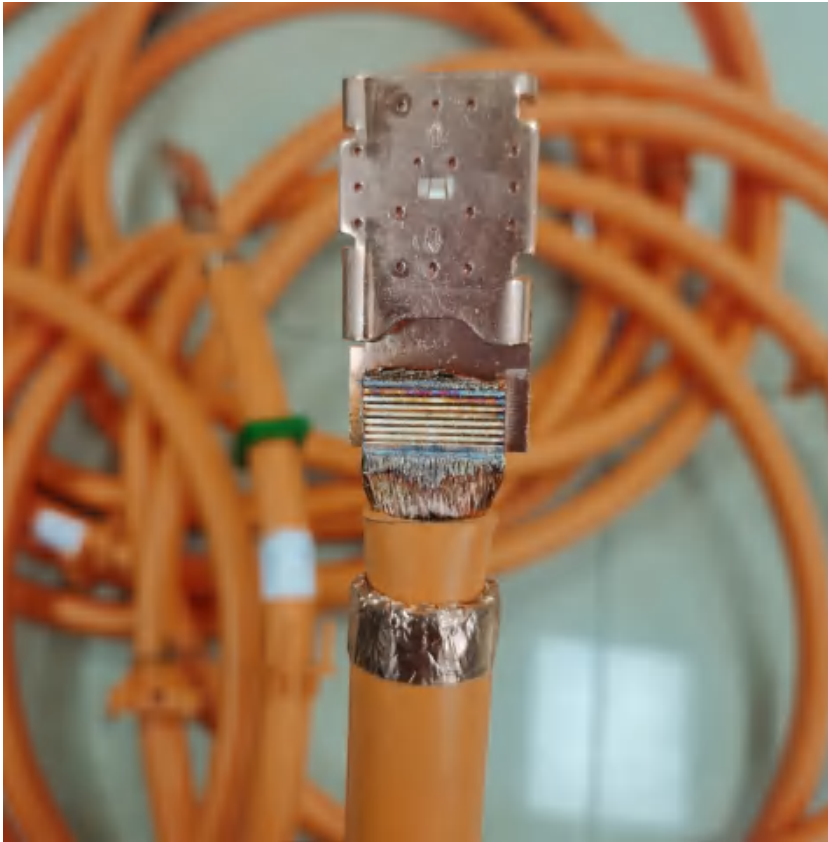
## TECH DATA

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Model	JCW-TS2050C
Output power	5000W
Frequency	20KHZ
Air supply	0.3mpa-0.7mpa
Power supply	380V
Max output	5000W
Ultrasonic Generator	High-power constant power digital power supply and self-developed ultrasonic generator
Weld mode	Constant power welding, digital adjustable welding time and power.
Protections	Current, voltage, impedance, communication error, over power, over time) software protection, 35 ampere hardware protection
Capacity	Wire to busbar, terminal, 50mm <sup>2</sup>
Weight	40KG

# Samples

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# Samples

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