

Application example

Flush welding conductors using ultrasonics

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SIEVING



Task

Flat, rectangular copper conductors need to be flush-welded using ultrasonic technology. The welded joint must not be thicker than the conductor, i.e. overlapping must be avoided. The small bead generated by the process is cut off.

Solution

By configuring the ultrasonic units in a special way and using individually designed sonotrodes, flat metal conductors can be flush-welded using ultrasonic technology. Telsonic has registered a patent for this technology. This can also be achieved using PowerWheel® technology, which is used when welding larger cross sections that require high levels of power.

Advantages of this configuration

This patent-registered technology can be used to quickly and reliably produce flush welds without having to significantly raise the welding point. With a high power of up to 14.4 kW, PowerWheel® technology can be used to flush weld copper or aluminum conductors with a cross section of up to 200 mm².



The application was welded using torsional PowerWheel® technology. Above, the Telso® Terminal TT7 with a maximum welding power of 14.4 kW.