

## Application example

### Compacting copper braid

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



#### Task

A copper braid needs to be compacted securely and quickly at the ends using ultrasonic technology. The individual strands at the area of crossover with the uncompacted braided flex must sustain as little damage as possible. Strength-related criteria and downstream processes require the degree of compaction to be as high as possible.

#### Solution

PowerWheel® technology is able to securely compact braided copper flexes with a cross-section of up to 160 mm<sup>2</sup>. Depending on the cross-section of the wire, applications like this one are processed either with a 6.5 kW MPX HD PowerWheel® system or the more powerful MT8000 with an output of 10 kW.

#### Configuration advantages

High outputs of up to 10 kW can be applied to the braided copper flex in a very short space of time, creating a secure connection between the individual wires and, as a result, achieving a high degree of compaction. The PowerWheel®'s normal direction of oscillation makes sure the individual wires are protected from vibrations, eliminating almost all damage to the individual strands when suitable tools are used.



The application was created using a 6.5 kW MPX HD PowerWheel® system and TCS5 welding process controller with touchscreen operation.