Application example

**High-flex 50 mm² cable on a contact**

**Task**

A very fine high-flex copper cable with a 50 mm² cross-section needs to be welded to a copper contact. The weld width must not exceed 9.6 mm. The welding process must not damage the fine individual wires.

**Solution**

The components are connected using PowerWheel® technology with an MPX HD welding system with a maximum output of 6.5 kW and sound protection casing accessible from three sides.

**Configuration advantages**

Because the weld nodes have to be relatively narrow, the fine wires place strict demands on the welding process – the patented PowerWheel® technology makes sure the weld is secure. PowerWheel® technology is able to generate even narrower welding nodes than with longitudinal ultrasonics. Furthermore, this technology has a positive influence on the risk of damaging the fine wires.

The application was welded with a 6.5 kW MPX HD PowerWheel® system and a TCSS controller with touchscreen operation.