

Application example

**Aluminium cable on an angled terminal**

PLASTIC WELDING

**METAL WELDING**

CUTTING

CLEANING

SCREENING



**Task**

An aluminium cable with a cross-section of 60 mm<sup>2</sup> needs to be welded to an angled, nickel-plated copper terminal. The weld needs to be as narrow as possible and the tensile strength and shearing load have to meet specified values.

**Solution**

PowerWheel® technology is ideal for connecting three-dimensional contact components with large cable cross-sections. The application is welded with an MT8000 PowerWheel® system with sound protection casing accessible from three sides. The welding process is managed with a TCS5 controller with touchscreen operation.

**Configuration advantages**

If the component were to be welded with conventional longitudinal technology, a welding width of just 15 mm could be achieved with this material. Thanks to PowerWheel® technology, this weld can be reduced to a width of 13 mm. In general, PowerWheel® technology offers benefits when it comes to accessing welding zones when connecting three-dimensional terminals.



The application was created using a 10 kW MT8000 PowerWheel® system and TCS5 welding process controller.