TELSONIC
ULTRASONICS

Application example

Aluminum cable on an angled terminal

PLASTIC WELDING | METAL WELDING | CUTTING | CLEANING | SIEVING

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

Task

An aluminum cable with a cross section of 60 mm² 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

Torsional PowerWheel® technology is ideal for welding three-dimensional contact parts with large cable cross sections. The application is welded using a system such as the Telso®Terminal TT7 with a sound protection casing that is accessible from three sides. The welding process is controlled and monitored using the Telso®Flex control software with touchscreen.

Advantages of this configuration

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.