Application example

Aluminium cable in a tubular cable lug

Task
An aluminium cable with a cross-section of 85 mm² needs to be securely welded into a tubular cable lug. The tubular cable lug is made of copper, plated with nickel and its walls are 0.8 mm thick. The pull-out strength must meet specified limits.

Solution
The application was successfully resolved using torsional PowerWheel® technology on an MT8000 system with a maximum output of 10 kW. The system is equipped with a sound protection case that is accessible from three sides. The welding process is managed with a TCSS controller with touchscreen operation.

Configuration advantages
The unique shape of the tubular cable lug and its thick walls require a large amount of energy to be applied in a short space of time in order to connect the aluminium cable to the inside of the cable lug. The thickness of the walls makes this task even more challenging. The application results in secure, strong welds.

The application was produced using a 10 kW MT8000 Power-Wheel® system and TCSS welding process controller.