

Application example

Contact on insulated conductor

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SIEVING



Task

An insulated aluminum conductor needs to be automatically and securely connected to power tapping bolts at any chosen place. The aim is to avoid complex partial insulation before making contact at the corresponding points.

Solution

The task was solved using torsional technology. The machine displaces the specially designed aluminum pins using torsional vibrations. This punctures the insulation and welds securely to the aluminum conductor rail in a ring-shaped design. The outer edge of the pin is pressed securely into the insulation while the inside is firmly bonded to the aluminum.

Advantages of this configuration

Intricate partial insulation of the conductor rail is not required. Furthermore, precise positioning of the previously insulated segments is no longer required in the production process. This process can take place quickly and securely at any point on the insulated conductor. The outer edge of the pin is pressed into the insulation, thereby guaranteeing a strong seal.



The application was welded using torsional SONIQTWIST® technology. Above, the TSP3000 torsional welding system.