

## Application example

**Connecting splices for copper/aluminium wires**

PLASTIC WELDING

**METAL WELDING**

CUTTING

CLEANING

SCREENING

**Task**

These days, the majority of wire harnesses used in vehicles are still made from copper wires; however, these are now being replaced by aluminium wires for cost reasons. Node connections are therefore no longer made from just copper, but instead contain aluminium or mixed compounds. As a result, wire splicing systems also have to be able to connect Al/Al or Al/Cu wire combinations, as well as Cu/Cu solutions. All production systems require regular calibration to make sure welding quality remains consistent across all installations with the same parameter settings.

**Solution**

The Telso®Splice TS3 wire splicing system enables you to produce terminal and connecting nodes for Cu/Cu, Al/Al and Al/Cu wire combinations. All systems are calibrated at the factory using the Telso®Scale test set so that all of the key production parameters, such as amplitude, force and path measurement sensors, are all within a tight tolerance range.

**Configuration advantages**

Suitable default parameter sets can be defined for the various welding materials and then stored in the software. Depending on the material pair, these sets can then be selected easily using the touchscreen. The Telso®Scale test set can be used to calibrate all systems located on a production line to make sure all Telso®Splice systems are at the same level. When combined with the welding parameter monitoring function and a set of limits, this helps to ensure consistent quality when welding.



The application was created on Telso®Splice TS3 wire splicing units.  
Telso®Scale test kit for regular system calibration.