

Application example

Earthing connection on capacitor housing

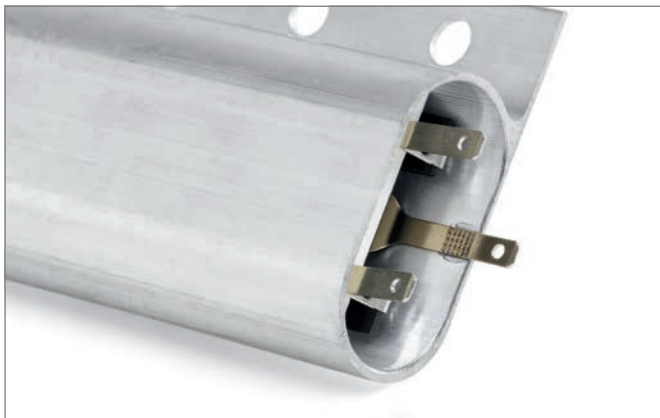
PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



Task

An earthing connection soldering tab made of nickel-plated copper needs to be attached to the aluminium housing for a capacitor. Access to the contact point is limited due to its location inside the housing.

Solution

Ultrasonic welding is ideal for producing electrical connections. A linear 20kHz MPX metal welding system with MAG generator and TCS5 process controller was used for this application. Thanks to the specially designed sonotrode with four protruding weld surfaces, the soldering tab inside the case can be welded on with ease.

Configuration advantages

The sonotrode's design featuring four protruding weld surfaces helps to ensure access to the welding point on the one hand, while also providing three replacement weld surfaces on the other. Using ultrasonic welding to weld nickel-plated metal components to aluminium produces outstanding results in terms of the strength and corrosion resistance of the connection.



The application was produced on a pneumatic 20kHz welding system with a TCS5 process controller and intuitive graphic touch-screen interface.