

Application example

Flat cable connectors on a ceramic substrate

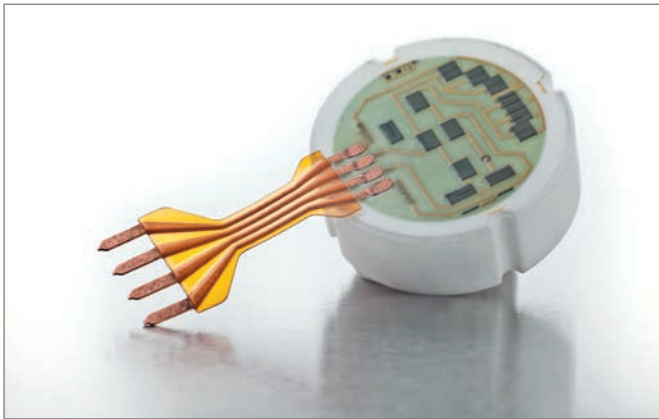
PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



Task

A ceramic component with a PCB layer (printed circuit board) needs to be connected to a four-way FCC (flat cable connector) at four different points. It is important to make sure the ceramic base is not damaged and the PCB layer does not become detached. The electrical contact resistance must be as low as possible.

Solution

The contacts were produced using longitudinal metal welding technology. Components from an M600 metal welding system (35 kHz frequency, 1200W output) and an ACC actuator controller integrated into a special system economically and reliably weld the FCC wires to the PCB layer of the ceramic base.

Configuration advantages

The high 35 kHz frequency protects the ceramic base from oscillations and keeps the risk of damage to a minimum. The compact actuator in the M600 weld press can be integrated into production systems to save space. The ACC actuator controller offers a high degree of flexibility when it comes to welding modes and connection to a higher-level PLC controller. With the optional Telso®Tools software, you can read out and store process data.



The application was produced using components in a linear M600 (35 kHz/1200 W) ultrasonic metal welding system and an ACC actuator controller in a special system.