Application example

Sealing pots, bowls, trays and blister packs

Task
Deep-drawn packaging containers made from plastic or plastic-coated aluminium foil (such as cans, pots, trays, etc.) have to be tightly sealed with film once they have been filled. Any product that gets into the sealing area must not affect the quality.

Solution
This application relies on the torsional SONIQTWIST® ultrasonic technology. Various welding systems with the appropriate level of welding force and power are available according to the size of the packaging unit. The modular MAG generators can be integrated into table systems as well as into fully automated production systems. As well as featuring an intuitive graphical user interface that makes it really easy to operate, the TCSS process controller also offers an extensive range of quality assurance options.

Configuration advantages
Unlike conventional ultrasonic technology, the torsional SONIQTWIST® method does not expose the welded-on film to any vertical vibrations. This means that no damage is caused due to the diaphragm effect. If the product gets into the sealing area, the ultrasonic vibrations clean it off again so that reliable welding is still achieved. The MAG generators are integrated into special systems using state-of-the-art bus systems. As a result, the welding parameters can be adapted and the results can be read out in real time.

These applications were solved using modular ultrasonic components, which were integrated into fully automated filling and sealing systems with a bus connection.