

## Application example

### Sachet sealing

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



#### Task

Once filled, packaging bags containing pourable products such as bicarbonate of soda or baking powder must be reliably and tightly sealed at the opening. The sealing quality must not be impaired if the welding area gets contaminated by the product. High quantities call for a fully automated filling and sealing process.

#### Solution

The sachet is sealed using ultrasonic welding technology. Various systems with frequencies of 20, 30 or 35 kHz and the relevant power rating are used according to the length of the opening. The ultrasonic components, such as the converter sonotrode, MAG generator and TCS5 process controller, can be integrated into rotary packaging systems as well as linear production lines without any difficulty.

#### Configuration advantages

Compared with thermal sealing, the ultrasonic welding method is very fast, making it cost-effective. All process parameters can be monitored and evaluated by means of set tolerance zones, which plays a major role in ensuring consistently high production quality. The ultrasonic vibrations create a cleaning effect in the sealing zone so that the sealing area still gets sealed tight even if contaminated by the product.



The application was solved using components from a USP750/3000 welding system, a MAG generator and a TCS5 process controller, which were integrated into a special system.