

Application example

Using ultrasonics to screen aluminium oxide efficiently

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



Task

Aluminium oxide is processed in large quantities in different industries for different applications: for example, in electrical engineering, in ceramic products or in grinding equipment as an abrasive powder. The screening system must fulfil strict requirements with regard to throughput rate, screen life and separation precision.

Solution

The use of SONOSCREEN®plus ultrasonic components, integrated in wobble or vibration screening systems, can significantly improve the screening output and quality. This application uses the SG47 generator and the SF converter with straight or 90° cable outlet. The ultrasonic vibrations are transferred to the screen fabric by a resonator ring.

Configuration advantages

The excitation of the screen fabric with high-frequency vibrations in the ultrasonic range reduces the friction and significantly increases the screening output, in some cases several times over. It also significantly reduces the wear on the screen fabric which, in the case of abrasive aluminium oxide in particular, means a much longer screen life. The SG47 generator can also be controlled via a PLC interface or via the company network.



The application involves screening and classifying with the aid of ultrasonics in a wobble screening machine with integrated SONOSCREEN®plus components with SG47 generator.