

Application example

Dedusting of sugar

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



Task

Sugar is available in different qualities and grain sizes in the form of granulated, caster or icing sugar. To ensure high-quality refined sugar, the dust content should be kept to a minimum. The sugar needs to be fractionated and, at the same time, the dust needs to be removed using a suitable process.

Solution

The high production volumes require high-performance screening machines – for example, rectangular resonance systems with multiple decks. The large-surface screening frames are each fitted with an oval coupling ring with resonance point excitation which applies ultrasonic vibrations to the screen fabric. The power is provided by piezoceramic converters and SONOSCREEN®plus ultrasonic generators.

Configuration advantages

The use of ultrasonics results in a much higher throughput rate with a lower degree of clogging and provides a dedusting effect thanks to the acoustic irradiation of the sugar crystals (clinging dust is detached from the crystals). The system is easy to operate via a membrane keyboard or interface which can be integrated into the system control or company network. With a maximum power output of 200 W, the energy demand is extremely low. The optimum setting can be selected from 16 preset configurations to ensure the best possible screening results.



This application involves screening in a rectangular screening machine with two screening frames, fitted with a SONOSCREEN®plus SF converter, oval coupling resonator and SG47 ultrasonic generator.