

Application example

Carbon powder

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



Task

When producing carbon, the ground powder must be screened and classified with a wide grain size range. This is carried out in wobble or vibration screening machines with multiple decks. Decks with fine screening meshes of up to 20 µm often result in a throughput bottleneck.

Solution

The production bottleneck that affects decks with fine fabrics can be eliminated by integrating SONOSCREEN®plus ultrasonic components. Ultrasonic resonators with converters are integrated into the screen frames of the relevant decks. The screen fabric is bonded to the screen frame and the resonator. This transfers the ultrasonic vibrations to the screen fabric and overlays them over the macrovibration of the screening machine.

Configuration advantages

Exciting the screen fabric with ultrasonics reduces the friction between the screened product and the fabric, which significantly increases the throughput rate. The microvibration of the ultrasonics also creates a continuous cleaning effect, which slows down the clogging of the screen fabric. The generator includes 16 preset, freely selectable configurations for different operating modes, thus ensuring the best possible screening result.



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