

Product Specification

Ultrasonic Sieving

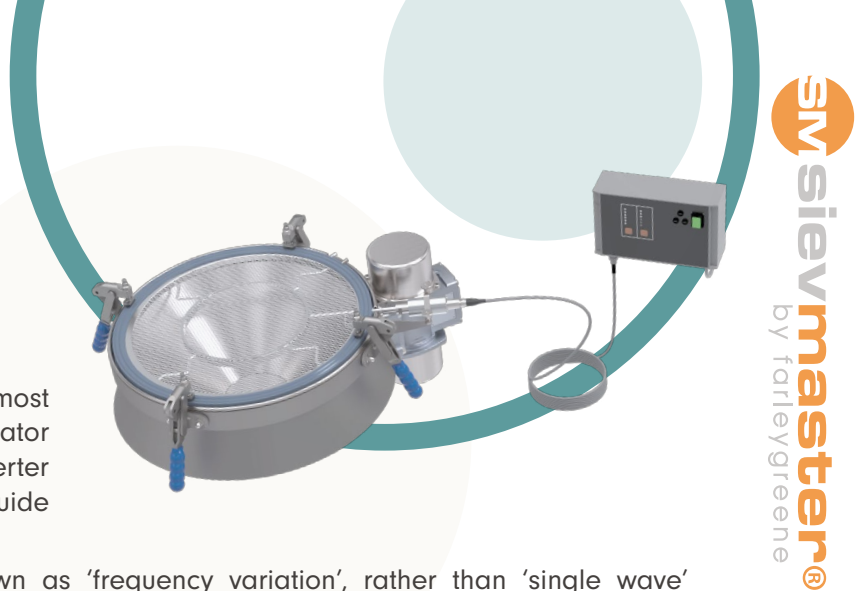
Ultrasonic System

A set of supplementary equipment used to prevent mesh blockage and blinding.

The ultrasonic system is designed to fit within most Sievmaster sieving machines. It uses a generator box connected to an externally mounted converter which applies ultrasonic vibrations to a wave guide and transmits them to a mesh screen.

It applies a continuously varying wave, known as 'frequency variation', rather than 'single wave' resonance frequency. This solves common problems such as heating and 'hot spots' that run the risk of causing premature mesh failure.

The Sievmaster Ultrasonic System is available with a variety of different options depending on each user's requirements. Please get in contact with your local Farleygreene distributor or with us directly to find out more about specifications for the ultrasonic system.



Features & Benefits

- Improves and ensures consistent throughput rates and helps to reduce maintenance by keeping the mesh clear.
- A hygienic design, all ultrasonic components (other than the mesh ring) are outside the product flow.
- The system uses frequency sweeping to minimise work hardening of mesh wires and better dissipate the build up of heat in the mesh, maximising the life span of the mesh.
- Self tuning ultrasonics that find the resonance frequency of the system they are attached to, meaning no operator input is needed when switching between mesh rings gaskets etc.
- Can be connected to and controlled/monitored by an external control system via the integrated RS232 port and generator.

Why ultrasonic screening?

- Delivers efficient sifting of powders with particle sizes of <300 micron
- Improves throughput up to 300% in some cases
- Helps to break down agglomerated materials
- Ensures a long term cleaning/deblinding effect
- Special attachment for use with laboratory test sieves
- Software package to allow remote control & analysing

How do ultrasonic screens work?

The generator creates a high frequency signal that the converter changes into an ultrasonic sound wave.

These oscillations are transferred to the mesh screen where they are evenly distributed. The oscillations of the mesh cloth reduce the frictional resistance between the powders and the screen. This reduces the tendency towards blocking and blinding, whilst fluidising the product as it flows across the mesh, resulting in increased throughputs.

