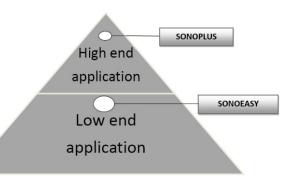


# Ultrasonic Supported Sieving Technology

### Sono screen

SONO SCREEN - Roop Telsonic Ultrasonix Ltd. has been involved exclusively with Ultrasonic Technology since 1982, for more than three decades, thanks to intensive research & development. Roop Teslonic Ultrasonix Ltd. is at the fore-front of Ultrasonic technology.







### N EW SIEVING TECHNOLOGY

- \* Conventional sieving technology is based on a vibrational / wave motion of the sieve which is responsible for the sieve throughput as well as the separation of oversized material.
- \* In addition to the conventional method, SONO SCREEN Ultrasonic Supported Sieving Technology evenly transmits as oscillating motion, in the micron range, onto the screen surface and reduces friction between the sieve mesh and bulk material.
- \* Depending upon the particle structure this reduction can result in a significant increase in throughput volume. Screen blinding and clogging are also reduced due to the cleaning effect the oscillating motion has on the sieve mesh.
- \* SONO SCREEN can be applied to both wet and dry sieving applications.
- $\star$  Promotes destruction of agglomerates, providing higher yield and reduction of the oversize particle fraction.
- ★ Screen mesh can be installed and clamped in the screen frame(with its built-in screen resonator) by the user.
- ★ Can be retrofitted to every vibration or wobble screening machine.





### System components for the sieving installation.

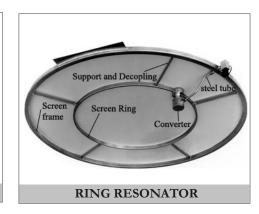
SONOSCREEN ATTACHMENT can be built into or retrofitted to all existing commercial sieving equipment. SONOSCREEN ATTACHMENT system components include:

- \* Ultrasonic Generator : A complete electronic unit that can be attached directly to the sieving machine, or mounted on a nearby wall.
- \* Ultrasonic Sieve Resonator: Consists of a converter with ring resonator which are connected to the sieving frame with mounting plates, HF-electrical connection with housing and plug.
- \* HF-connector cable: Standard length 3m/10 ft connects the Ultrasonic Sieving Resonator to the Ultrasonic Generator.

SONOSCREEN ATTACHMENT System is suitable for various frame shapes and sizes. Special systems that meet the specifications of the pharmaceutical and other special applications are also available.







### Technical specifications and component details

SPECIFICATIONS AND COMPONENT DETAILS	SONOEASY	SONOPLUS
Input Supply	Standard 115/230 VAC,50-60 Hz	220VAC,50 Hz.
Ultrasonic Power Output	100W Max Continuous and pulse mode.	200 Watts, Continuous and pulse mode.
Frequency	33-37 kHz	36 kHz
For your existing vibro-shifter Diameter is	8" to 12"	8" to 60" and above.
Ultrasonic Generator	SG-4Lpro	SG-45-200
Detachable Converter	Screwed on outside of the frame.	Screwed to the ring resonator.
Ultrasonic Attachment	To be welded on outside of frame.	To be welded on vibro-shifter mesh frame.
HF CableLength	3m	5m and 10m long.

Above all models are available in FLP and are ATEX approved.
Certificates are for operation in zone 21 & 22 ATEX dust and are protected by IP65 class.



#### PPLICATIONS AREAS :-

\* Hygenic and Sterile Environment: Pharmaceutical Industry, Healthcare, Food and Beverages.









\* Metal Powder Industry: Precious metals like Nickel & Tungsten & their Alloys, Gold, Zinc, Titanium and others including Iron Powder, Iron Oxide, Carbon Powder, Aluminum & Aluminum Oxides, Manganese, Graphite, Bismuth, Cobalt Oxide, Cadmium, Molebdenum, Grinding Wheel Powder, etc.







\* Chemical Industry: - Various Bulk Drugs, Herbal Medicines, Cosmetics Industry, Tooth Powder, Silicon Carbide, Dyes, Pigments and various, Fine Chemical Powders also.

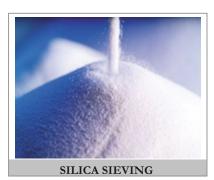








\* Abrasive and Ceramic Industry - Quartz Abrasive Powder, Ceramics, Silica, Silica Gel, Glass Powder, Potassium, Titanate, Fly Ash, Fine Re-fractories, Etc.







\* And Many others...

## THE SIGNIFICANT ADVANTAGES.

#### **Cost Effective**

- \* Powder sifting is accelerated with the use of Ultrasonics.
- ⋆ Compared to conventional methods powder wastage is greatly reduced.
- \* The system has a low power consumption of approximately 60 Watts/m2 of screen area.
- \* Short pay-back period due to incomparable cost effectiveness.



#### Enhancement in Quality

- \* Mechanical cleaning can be eliminated, therefore preventing foreign particles from entering the bulk material & improves the end powder quality.
- \* Patented ring resonators produce an even distribution of mechanical oscillations, even for larger sieving frame sizes.





#### **Faster**

- ★ Considerable decrease of sieve screen blinding and clogging results in a significant increase in throughput volume. (i.e.3-30 times depending on material and size of particle.)
- ★ Maintenance-free operation.
- ★ Can be operated in continuous & pulse vibration mode with adjustable amplitude.





#### **Economical**

- Running cost of ultrasonic powder equipment is reduced drastically Compared to conventional equipment.
- \* The sonically active components are exposed to virtually no wear at all, which reduces maintenance cost and thus more economical.



NOTE: Technical specifications are subject to change without prior notice, due to continuous upgradation.



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