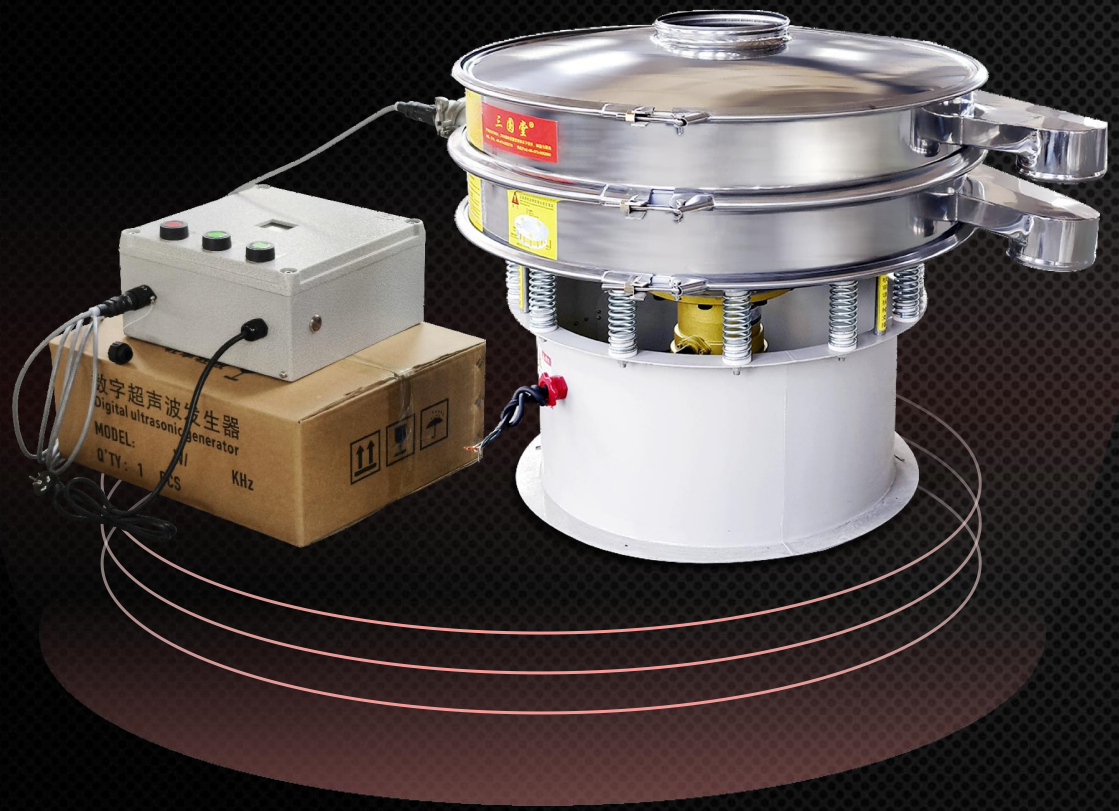
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ULTRASONIC VIBRATING SCREEN

It is especially suitable for users of high value-added fine powders.



The ultrasonic vibrating screen is a fine screening machine. It is based on the ordinary rotary vibrating screen, adding a high-frequency and low-amplitude ultrasonic controller to the screen. The ultra-fine powder receives huge ultrasonic acceleration so that the materials on the screen surface always remain suspended, thus suppressing screen-blocking factors such as adhesion, friction, leveling, and wedging.

Solving screening problems:

- Strong adsorption
- Easy to reunite
- High static electricity
- high density
- Light specific gravity



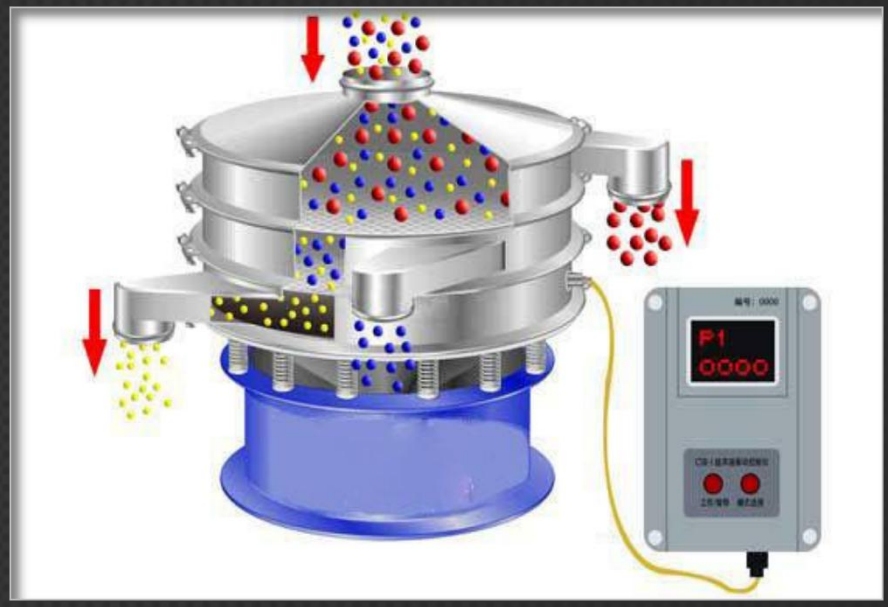


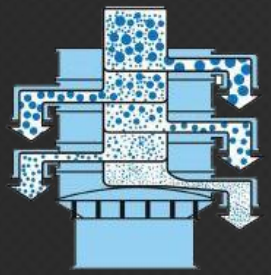




WORKING PRINCIPLE

The system converts 220V, 50Hz or 110V, 60Hz electrical energy into 36KHz high-frequency electrical energy, which is then input to the ultrasonic transducer. The transducer transforms this energy into 36KHz mechanical vibrations, causing the screen to vibrate at a high frequency. While the materials on the screen undergo low-frequency rotary motion, they are also superimposed with ultrasonic vibrations. This prevents mesh blockage, increases the screener's output and quality, and achieves efficient screening and mesh cleaning. This system makes it easier to screen ultrafine powders. By introducing a low-amplitude, high-frequency ultrasonic vibration wave (mechanical wave) to the screen, the system improves the screening performance of ultrafine particles, especially benefiting users handling high-value fine particles.

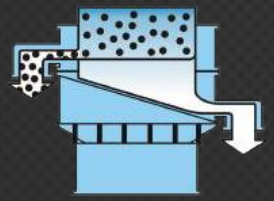




Hierarchical filtering



Screen impurities



solid-liquid separation



0° for coarse fraction



30° suitable for most sieving



60° suitable for fine sieving



90° for special purpose

VIDEOS




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Professional filter and sieve 30 years


Ultrasound vibrating screen
This is without ultrasound working state.



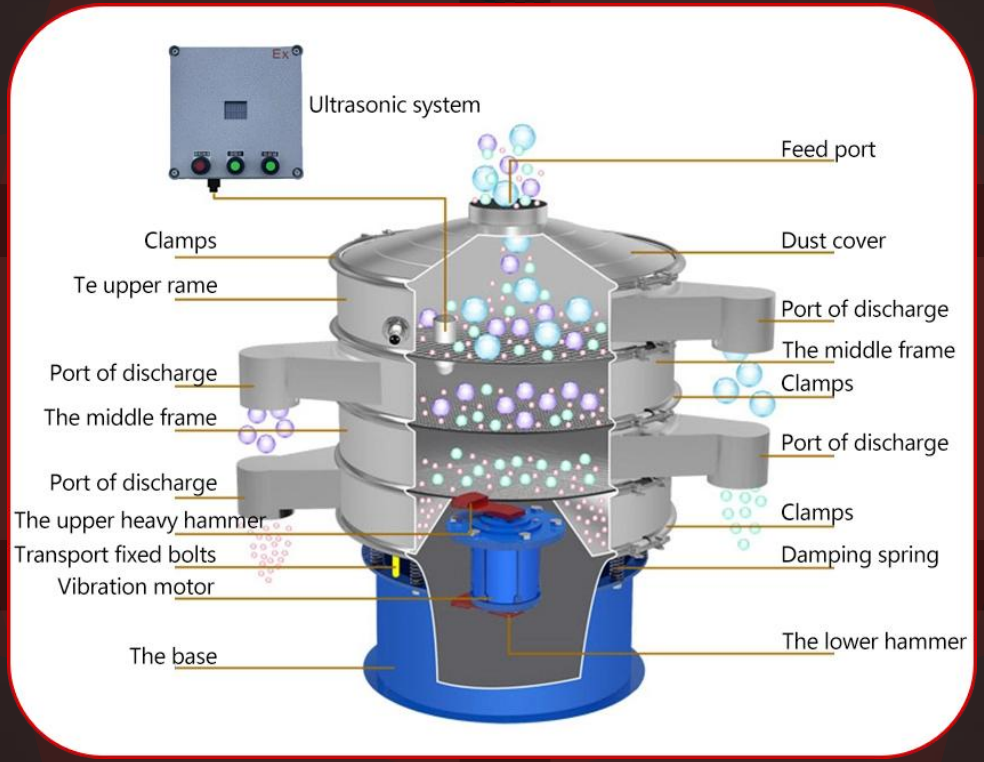
STRUCTURES

Ultrasonic Vibration Screen Power Supply

High-frequency, high-power ultrasonic power supply.

TRVV Connection Cable

The connection between the ultrasonic transducer and the ultrasonic vibration screen power supply is achieved through a cable.



Connector

Aviation connection plug-in.

Transducer

High-performance ultrasonic conversion device

Ultrasonic Mesh Frame

This consists of an outer frame and a resonator.

Screen Mesh

Suitable for mesh sizes ranging from 10 mesh to 635 mesh.

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DETAILS SHOW

Probe Connector





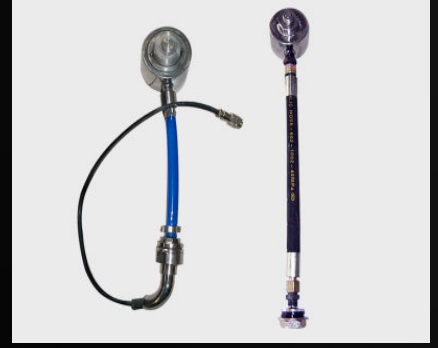
Screen

Damping Springs

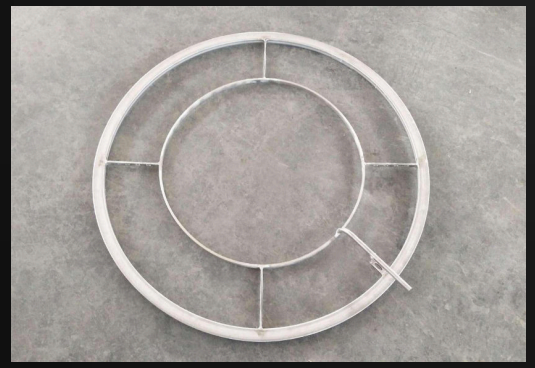




Ultrasonic system



Waveguide Probe



Ultrasonic grid

Drive Base

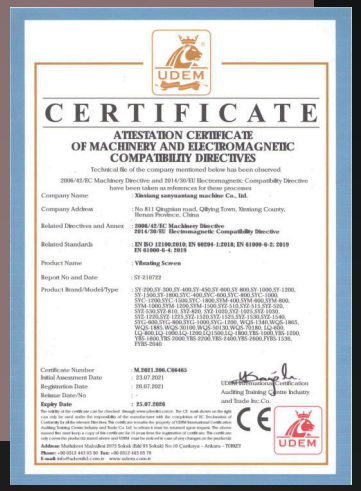


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High stability

Sanyuantang ultrasonic rotary vibrating screen exclusively uses the upper cover and bottom frame to be integrally formed. The machine has strong stress, strong stability and long service life.



CE export qualification

Digital ultrasonic generator, focusing on the screening system. Explosion-proof qualifications, CE exports to EU qualifications with complete qualifications.



Good environmental protection

The integrated molding technology of key parts and high-efficiency laser cutting technology make the operation of various parts of the machine highly coordinated, low-noise, and highly environmentally friendly.

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FEATURES OF ULTRASONIC VIBRATING SCREEN

01

Control particle size range

While achieving high precision and high mesh screening, it also controls a narrow particle size range.

02

Multi-layer use

Can be used in single or multi-layer, one set of intelligent ultrasonic generator uses three transducers at the same time.

03

Prevent Clogging

Screen self-cleaning function: greater than 500 mesh screening, no mesh blockage, no screening efficiency attenuation.

04

Material properties are more stable

Ensure that the properties of the processed materials remain unchanged.

05

Improved accuracy and production output

Screening accuracy can be increased by 1-99%, and output can be increased by 1-8 times.

06

Automatic Working

The fully enclosed design eliminates dust pollution and automatically discharges impurities and coarse materials. The transducer does not generate heat during long-term operation and can work continuously.

Ultrasonic system advantages

Intelligent control

Remote monitoring and automatic adjustment functions ensure the machine works in the best condition.

Explosion-proof certification

The power box is moisture-proof, corrosion-proof and explosion-proof, which improves the stability and service life of the vibrating screen.

Error alarm

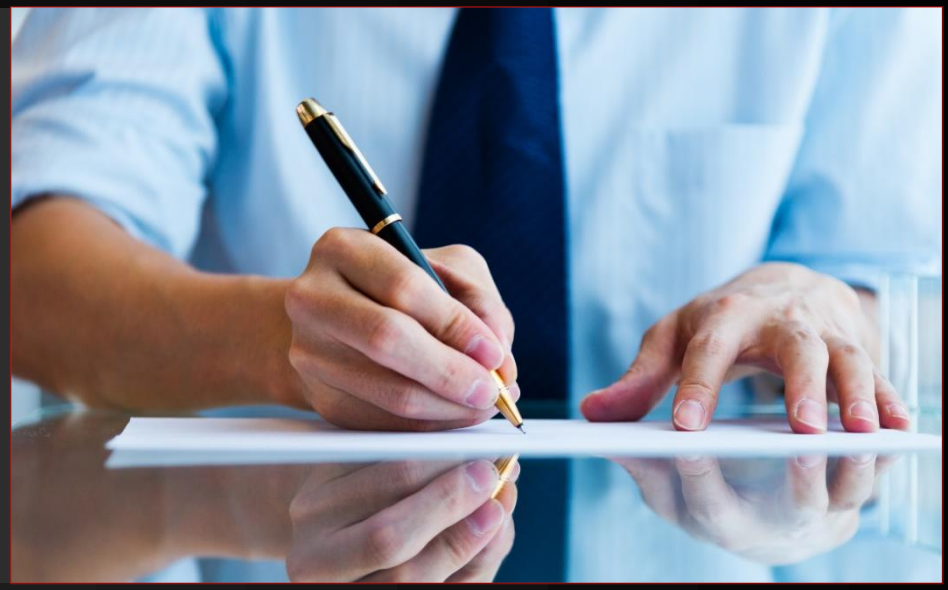
When the system encounters a fault, it will automatically stop working. After troubleshooting according to the prompts, it will restart to work normally.

Comparison of the effects of ultrasonic vibrating screen and ordinary vibrating screen

Mode l(mm)	Testing materials	Ordinary screening machine		UItrasonic vibrating screen	
		Mesh	Test results	Mesh	Test results
1000	Silicon carbide	500	Unable to screening	500	1500KG/H
	Tungsten powder of cemented carbide	600	No fine powder was sifted out for 15 minutes	600	30KG/H
	vitamin c powder	400	1KG/H	400	120-150KG/H
500	Pollen	400	No fine powder was sifted out for 15 minutes	400	Screen out 20% in 15 minutes.Fine and effective classification can be carried out in fine workmanship.
	Nickel powder,Cobalt powder	325	Screen three times to meet the requirements	400	Screen once to meet the requirements
450	Ndfeb powder	300	32.2% residual sieve in 30 minutes	300	6.9%residual sieve in 30 minutes

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ULTRASONIC VIBRATING SCREEN MATERIAL SELECTION



Standard



Full stainless steel



All carbon steel



SPECIFICATIONS

Model	Layers	Granularity (mm)	Screening area (㎡)	Sieve Mesh	Effective Diameter(mm)	Power (KW)
SYC-XZS400	1-3	<20	0.1	20-600 mesh	380	0.25
SYC-XZS600	1-3	<20	0.23	20-600mesh	580	0.55
SYC-XZS800	1-5	<30	0.41	20-600 mesh	780	0.75
SYC-XZS1000	1-5	<30	0.65	20-600 mesh	970	1.1
SYC-XZS1200	1-5	<30	0.99	20-600mesh	1170	1.5
SYC-XZS1500	1-5	<50	1.58	20-600 mesh	1470	2.2
SYC-XZS1800	1-5	<50	2.32	20-600 mesh	1770	3.0

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SPECIAL CUSTOMIZED DESIGN



Add hopper

The feed port is equipped with a hopper to facilitate even feeding.

Install a stainless steel scraper (or brush) to speed up the screening speed of materials through the screen.

Add Scraper





Large diameter

Increase the diameter and increase the upper frame.

APPLICATION

Chemical Industry	Plastic powder, rubber powder, pigments, fillers, resin powder, PTFE powder, etc.
Food Industry	Flour, sugar, vegetable protein, milk powder, salt, allspice, pepper powder , malt powder , coffee powder , MSG, etc.
Metallurgical industry	Alloy powder, (gold, silver, copper, aluminum, nickel, chromium, magnesium, zinc, barium, vanadium, nickel, strontium, lead) powder, foundry sand, etc.
Pharmaceutical industry	Western medicine powder, Chinese medicine powder, pharmaceutical intermediates, pearl powder, etc.



















CASES







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THE SERVICES WE CAN PROVIDE

Sanyuantang Machine Co., Ltd. has been engaged in foreign trade export for more than 10 years. Its rich export experience ensures that you have worry-free purchasing.

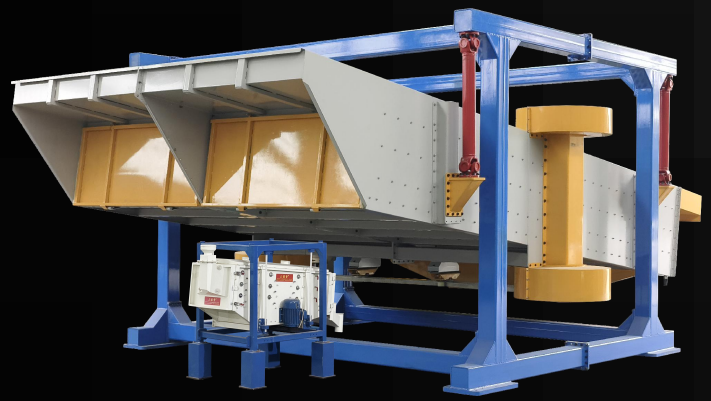
When you cooperate with us, you can enjoy:

① Timely response through various communication tools.

② Professional technical guidance to choose the most suitable product for you.

③ Economical transportation scheme to cut down transportation cost.

④ Thoughful after-sales tracking service from the installation to the daily maintanence.







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