

CIRCULAR VIBRATING SCREEN – CVS SERIES

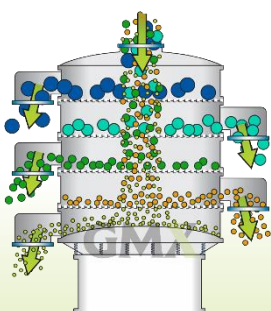
GMX CIRCULAR VIBRATING SCREEN (CVS)

The CVS series is ideally suited for classifying, scalping and de-dusting nearly all powders and bulk solids, as well as for separating solids from liquids.



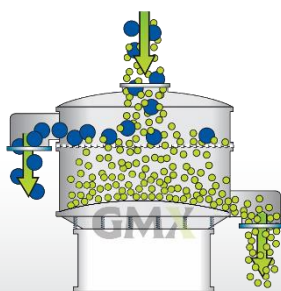
CVS Series

VERSATILE USE



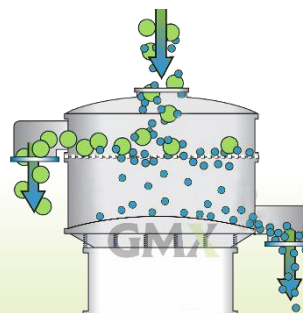
Classifying

Separating solids into up to 5 predetermined particle size fractions simultaneously.



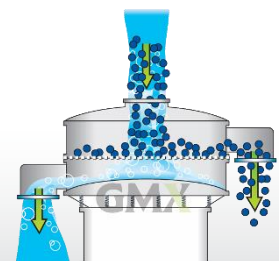
Scalping

Eliminating a small portion of oversized particles from a large portion of correctly sized particles.



De-Dusting

Eliminating a small portion of undersize particles from a large portion of correctly sized particles.



Separating solids from liquids

Removing oversized solids from various types of slurries or separating liquids from solid/liquid mixtures.

FEATURES

Customizable Options

The CVS Series can be tailored to meet various screening requirements, offering different sizes and up to 4 screen decks.

The machine can be constructed from carbon steel or stainless steel (304/316L) with surface treatments such as powder coating, polishing, or bead blasting.



Less Blinding

The CVS Series offers a variety of anti-blinding devices, including bouncing balls, cleaning rings, cleaning brushes and ultrasonic cleaning devices. These options help prevent screen cloth blinding and ensure screening efficiency.



Low Foundation Loads

The CVS Series features a base frame with low-noise rubber springs for vibration insulation, minimizing load and impact on its foundation. This design ensures stable operation on light or standard foundations.



Quick Screen Replacement

Thanks to the Quick Release Clamping System, the CVS Series enables 1-2 operators to replace the screen cloth in just minutes without the need for tools, ensuring fast and efficient maintenance.



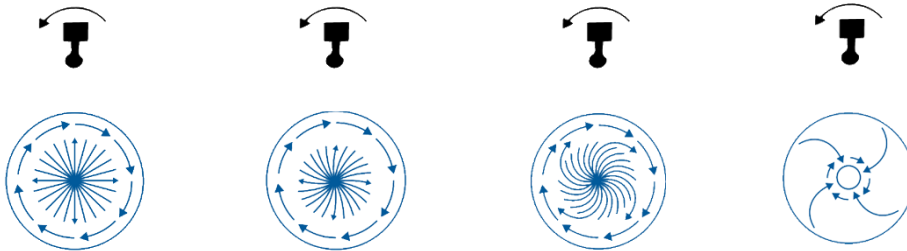
HOW IT WORKS

Particles in the GMX Circular Vibrating Screen move in a three-dimensional motion driven by a flange mounted vibrator motor. The motor is equipped with upper and lower unbalanced weights.

- The upper weight is located near the center of gravity of the CVS machine, and its rotation generates horizontal vibrations that direct material outward across the screen cloth.
- The rotation of the lower weight creates vertical and tangential vibrations by tilting the machine.
- The combined effect of the upper and lower unbalanced weights causes the material to vibrate in a spiral pattern on the screen cloth.
- The angle of both weights can be adjusted independently, optimizing screening throughput and efficiency for different materials.



Upper



Lower



When the two weights are aligned and in phase, the material flows from the center to the periphery of the screen cloth in a straight line.

At this point, the discharge speed of the material is the maximum.

When the lower weight rotates ahead of the upper weight by an angle of no more than 90 degrees, the material spirals from the center to the periphery of the screen cloth.

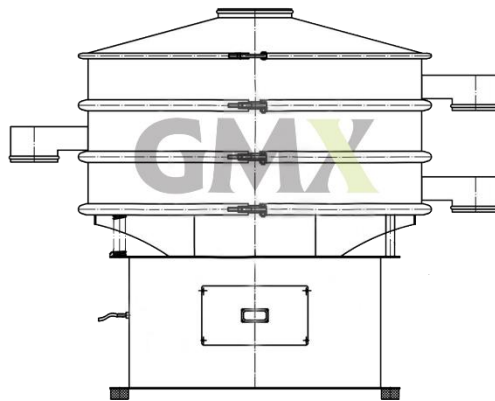
The larger the angle, the longer the material stays on the screen, leading to higher screening efficiency.

When the lower weight rotates ahead of the upper weight by an angle of 90 degrees or more, the material spirals toward the center of the screen, preventing oversize material from being discharged and assisting in finer material pass through the screen cloth.

Datasheet

Mesh opening	2-600 mesh
Max capacity	5 t/h
Operating speed	1500 / 1800 rpm (at 50Hz / 60Hz)
No. screen decks	1-4 per machine
Materials	304/316 Stainless steel; Carbon steel; Rubber materials FDA compliant
Surface options	Powder coating; Polishing; Bead blasting; Other specialized coating applied to material contact surfaces
Anti-blinding devices	Bouncing balls; Cleaning rings; Ultrasonic cleaning devices; Combination

Dimensions



Types		CVS 600	CVS 800	CVS 1000	CVS 1200	CVS 1500
Mesh surface	m ²	0.25	0.45	0.71	1.05	1.6
Engine performance	kW	0.25	0.55/0.75	0.75/1.1	1.1/2.4	2/4
Weight	kg	90-150	130-190	160-220	195-295	400-520

Measurement

		CVS 600	CVS 800	CVS 1000	CVS 1200	CVS 1500
ΦD (Overall diameter)	mm	600	800	1,000	1,200	1,500
A (Base height)	mm	455	510	565	620	685
H (Overall height)						
1-Deck	mm	850	930	1,050	1,135	1,300
2-Deck	mm	960	1,070	1,230	1,310	1,500
3-Deck	mm	1080	1,220	1,400	1,485	1,700
4-Deck	mm	1200	1,360	1,580	1,660	-