

Screen



Structure

The equipment is mainly composed of: screen box, support, screen plate, vibration motor, shock absorber, etc.; the riveting welding process is adopted to eliminate welding stress accumulation and improve the overall strength and life of the equipment; the structure below the screen plate has no internal angle or gap.

How it works

The screen is designed with dual motors for self-synchronous operation, providing an adjustable exciting force to optimize performance. Its linear motion trajectory and multi-layered, large-angle screen surfaces are engineered to enhance screening efficiency. The inclination of the screen surfaces progressively increases from top to bottom, ensuring a more effective classification process.

Utilizing probability theory, the screen apertures are 1.2 to 2.2 times larger than the targeted screening particle size. This design significantly boosts screening efficiency and throughput capacity. Unlike conventional screens, the probability grading screen classifies materials based on screen openings that are larger than the desired particle size, allowing for faster material stratification and separation.



The system comprises a rigid frame, multiple overlapping screen layers with an increasing slope from top to bottom, progressively decreasing screen hole sizes, and two high-frequency vibration motors. The entire equipment is mounted on elastic support components to absorb operational forces and maintain stability. Also, distributr can be added for better screening effect.

Products Parameters

Number of Layers	4	Vibration Motor Power	1.5*2kW
Screen Area	3m ²	Vibration Motor Speed	980r/min
Screen Aperture	0.2-20mm	Single Support Load (Working)	±790
Screen Inclination	20° - 30°	Single Support Load (Stop and start)	±3950
Feeding Particle Size	≤40	Capacity	10-40t/h
Double Amplitude	4-6mm	Weight	2200kg

Technical Advantages

- Even material distribution and high screening efficiency.
- Large material handling capacity per unit area and the screen holes are not easy to be blocked.
- Fully enclosed, no dust spillage, stable operation.
- Several products with different particle sizes can be produced at the same time.
- A single machine can sort 2-7 particle size materials at the same time.
- The screen surface is easy to replace, the screen is moderately tensioned without layering or blocking.



Application

Screens are widely used in the screening of dry granular materials in mining, building materials, electric power, chemical industry, glass recycling industry and other industries.