

Vibrating Screens

Electro Zavod Vibrating Screens are economical, customisable for specific applications and designed for maximum screening efficiency with the smallest possible screening area. Special attention is given to various factors during screen design to ensure maximum performance: G-forces, vertical acceleration, single particle ballistic and stratification of the product.

Technology partner

JOEST, Germany

Salient Features

- Custom-made to suit any application
- Weight-optimised and load-minimised design
- Thin bed screening for maximum efficiency
- Huck bolted construction for equipment longevity
- Suitable for adverse working conditions
- FEA (Finite Elements Analysis) based mechanical design

Advantages: Low noise, minimal maintenance

Key categories

- **Vibrating grizzly screens** are used for extracting small, coarse materials from storage hoppers. These are tailor-made for specific applications with the capability of handling a wide range of materials from 2500tph iron ore to 200tph of quarry stone. The key features include:
 - Robust construction with wear-resistant liners (steel/rubber) and swage-type bolt connections
 - Operates with large stroke & 'G' force
 - Designed for isolation mounts and direct coupled drive
 - Suitable for operations in most arduous operating conditions
- **Circular motion screens** are highly effective at handling high volumes of difficult-to-detect products such as angular, fibrous, and wedge-shaped shredded parts. These are operated either by a centrifugal force exciter for circular motion or by a single unbalance motor mounted overhead of screen body creating an elliptical rotation in the conveying direction. These screens can function effectively at a slope angle between 15° and 25° and with the machine G-force would be lower than 5g

- **Linear motion screens** provide maximum performance and capacity using 'thin bed' screening technology. Operated either by two unbalance motors or by a mechanical exciter, these screens work best at low inclination with slope angles between 0° and 15°.
- **Multi-slope vibrating screens** are designed for fine particle separation requiring high level of precision. With varying deck slopes, the screens achieve greater screening efficiencies at higher capacities than conventional horizontal-type screens. Additionally, the uniform bed of material from feed to the discharge end of the screen helps in stratification of fines at the bottom of the bed ensuring effective separation.
- **Dewatering screens** are suitable for separating solids from liquids in the wet ore and mineral processing industry. The screens are positioned at a slight incline (upward slope of 3°) to maximise effectiveness while the high frequency of vibration increases the efficiency of sizing and dewatering. The adjustable discharge plate allows for fine-tuning.

Applications: Mines and Quarries, Cement and Steel industries, Fertilizer plants, Chemical and Pharmaceuticals plants, Food industries, Glass factories and others.

