

The combination of wedge wire screen materials with different types of filtration media marks a significant breakthrough in filtration technology. This collaboration enhances performance in a way that is greater than what each individual part can achieve alone. While wedge wire screens can set a specific filter rating at first, this limitation can be changed by adding finer filtration media that can be adjusted as needed for different processes. This fresh approach is changing the game, leading to greater efficiency and flexibility in filtration systems.



Wedge Wire Screen:

Wedge wire screens play a critical role in the mineral processing industry for mining by providing efficient screening, filtration, and separation solutions. Here are several key functions they serve:

▲ **Ore Screening:** Wedge wire screens are used to separate ore particles by size during the early stages of mining. The precision gap openings ensure effective classification, allowing for the efficient processing of raw materials.

▲ **Filtration of Slurries:** In mineral processing, the wedge wire screens filter out fine particles and impurities from slurries. This is essential for clarifying the slurry, which enhances the efficiency of subsequent processing stages.

▲ **Recovery of Valuable Minerals:** These screens are used in tailings management to separate recoverable minerals from waste material after ore extraction. This process maximizes resource recovery and minimizes environmental impact.

▲ **Environmental Management:** Wedge wire screens are employed in the treatment of recycled water by removing solids and pollutants, supporting sustainable practices in mining operations and promoting water reuse.

▲ **Particulate Control:** By regulating particle size and distribution, wedge wire screens improve product consistency and performance, which is essential for maintaining product quality in the competitive mineral market.

▲ **Quality Assurance:** At the end of the production line, wedge wire screens are used for final product inspections to ensure that the mineral products meet industry standards and specifications before shipping.

Overall, wedge wire screens are integral to the efficiency and effectiveness of various processes in the mineral processing industry, contributing to improved resource utilization, environmental management, and product quality.



Next Level Filtration

The combination of wedge wire screen materials with different types of filtration media (such as woven mesh, metallic fibers, perforated / laser etched metal sheet and metal powders) marks a significant breakthrough in filtration technology. This collaboration enhances performance in a way that is greater than what each individual part can achieve alone. While wedge wire screens can set a specific filter rating at first, this limitation can be changed by adding finer filtration media that can be adjusted as needed for different processes. This fresh approach is changing the game, leading to greater mechanical integrity, filtration efficiency and flexibility in filtration systems.

These hybrid materials are next level processing tools supporting processing at all levels of wet / dry grinding, sizing and drying of minerals from pigments to rare earth minerals including the top 50 critical minerals defined by the department of Interior Geological Survey notice document number 2022-04027. The focus of the new filter media is to extend the reach of conventional wedge wire solutions (typically 50 microns) down to 2 microns.

Some additional examples of wedge wire screens used in mining applications:



Sieve Bend Screen



Flat Panel – Shaker Screen



Flanged Screen Strainers

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