

Mining Magnetic Drum Separator for Material Recovery

This mining magnetic drum separator removes iron powder from particulate and powder materials. It efficiently recycles resources in industries such as wood, mining, and chemical processing.



Overview

High-Efficiency Magnetic Separation

The Mining Magnetic Drum Separator is engineered to effectively remove iron powder from particle and powder materials, facilitating resource recycling across multiple industries. It excels in wet magnetic separation for materials with particle sizes smaller than 3mm, such as magnetite, pyrrhotite, and ilmenite. This versatile machine is widely applicable in wood, mining, ceramics, chemical, and food processing sectors due to its robust design and high universality.

Technical Capabilities

Separation Method

Wet Magnetic Separation

Performance Metrics

3 mm

Max Particle Size

Maximum Particle Size

3 mm

Applications

Compatible Materials

- Magnetite
- Pyrrhotite
- Roasted Ore
- Ilmenite
- Coal
- Non-metal Materials
- Iron Powder

Target Industries

Mining, Wood Processing, Ceramics, Chemical, Food Industry, Construction Materials

Operational Details



The magnetic drum separator is designed for continuous mineral recovery and material refinement in demanding mining environments.

Magnetic Chain Formation

Ore pulp flows into a magnetic groove where particles enter a loose status. Magnetic particles form chains that move toward alternating magnetic poles on a rotating cylinder. Non-magnetic gangue is separated during rotation, while the concentrated magnetic material is washed into a dedicated groove by a spray pipe or removed via a brush roll.

Key Features

- Alternating magnetic pole arrangement
- Continuous operation capability
- Integrated feeding spray pipe
- Ore unloading pipe for concentrate washing
- Optional brush roll for mineral unloading