



SUSPENDED SEPARATION EQUIPMENT

***Over 117
Years of***

**SUSPENDED
SEPARATOR
EXPERIENCE**

***PERMANENT
&
ELECTRO
MAGNETIC***



Walker Magnetics

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ELECTROMAGNETIC SUSPENDED SEPARATORS

Self-Cleaning and Manual

Deep penetrating electromagnets, incorporating all of the latest innovations in coil design, allow Walker's Electromagnetic Suspended Separators to remove both large and small tramp metal from deep burdens on fast-moving conveyors. The separators are designed for continuous operation at peak performance.

Electromagnetic Suspended Separators are available in manual and self-cleaning designs.

Manually cleaned magnets are discharged electrically.

Self-cleaning magnets can be mounted in line with the material flow or transverse to remove the ferrous materials over the side of the conveyor.



- 115 or 230 VDC aluminum coils with Class R (220° C) insulation
- 100% duty cycle, oil cooled
- Space wound aluminum coils for rapid heat dissipation
- Internal oil expansion chamber with pressure relief valve and drain plugs
- Heavy wear-resistant non-magnetic steel bottom plate

Self Cleaning Features:

- Heavy-duty self-aligning sealed bearings
- Rugged structural steel frame
- TEFC motor
- Single head and tail pulleys on smaller units, compact four-pulley design on larger units
- Heavy cleated rubber belt with take-up adjustment
- Four-point suspension
- Shaft-mounted reducer

DYNAFORCE SUSPENDED SEPARATOR

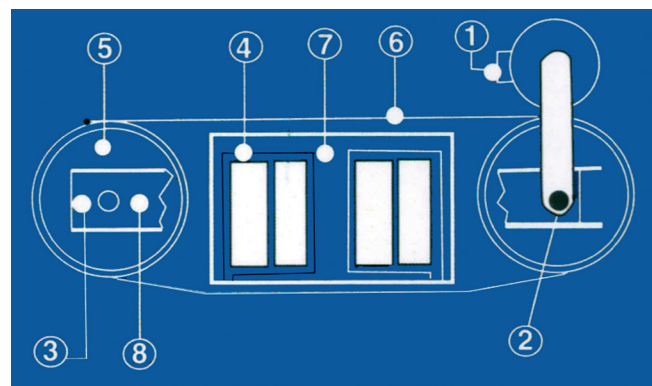
2 & 4 Pulley Construction - Belt Speeds up to 700 FPM

Ideal for tramp iron removal

Walker Magnetix provides the best in suspended Magnet and Separator design with its experienced staff of design engineers. Over 50 years of field expertise has shown us what is required to make these separators the best available for consistent and proven performance. We have incorporated a 2 and 4 pulley design for most sizes for ease of tracking, providing longer belt life. Large pulleys are used to increase belt life. Large shaft diameters are used for additional bearing life. Heavy-duty bearings will provide virtually maintenance free operation.

Walker Magnetix will provide the proper selection of the best and most economical unit for your application.

- 2 & 4 Pulley Construction
- Shaft mounted reducers
- Mounting flexibility
- Cool operating coils
- Oil or FR3® coolant
- Internal oil expansion chamber
- Heavy-duty belts
- Full range of sizes



1. Heavy-duty shaft mount motor reducer
2. Heavy-duty flange bearings
3. Heavy-duty take-up bearings
4. Liquid dielectric gap wound coils
5. Heavy-duty 2 & 4 pulley construction on most sizes
6. Heavy-duty belt with stainless steel or vulcanized rubber cleats
7. Internal expansion chamber
8. Heavy-duty frame for suspended or base mounting

PERMANENT MAGNET SUSPENDED SEPARATORS

Self-Cleaning and Manual

Walker's Permanent-Magnet Suspended Separators use powerful Cermax® magnets for increased efficiency in the separation of ferrous materials. The permanent magnet design has a lower installation cost than the electromagnet type, because no DC rectifier is required, and operating costs are also lower, since the magnets consume no power. Suspension heights up to 10" - 12" are available.

These separators are available in manual and self-cleaning designs. Manually cleaned magnets can be supplied with a stripper mechanism, and the self-cleaning type uses a two-pulley design. Parallel self-cleaning magnets are mounted in line with the material flow, while transverse self-cleaning magnets remove the ferrous materials over the side of the conveyor.

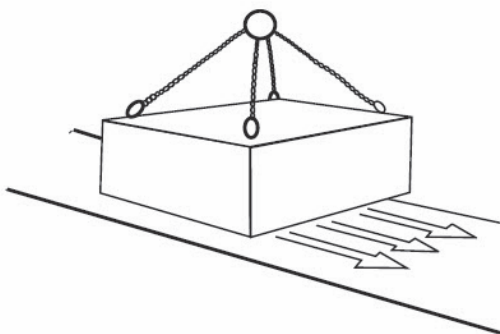
Standard Magnet Features:

- High-powered Ceramax magnetic circuit for deeper field penetration
- Heavy-duty welded construction for years of service
- No power consumption, virtually maintenance-free
- Extra thick bottom plate for wear resistance

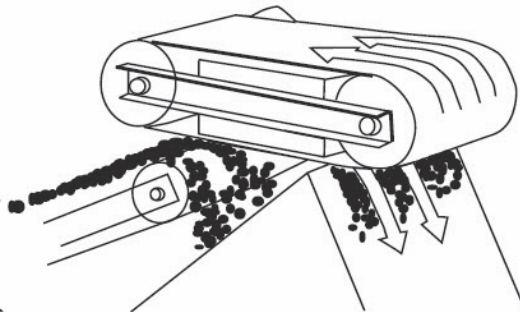
Standard Self-Cleaning Magnet Features:

- Shaft mounted speed reducer
- TEFC motor
- Belt take-up adjustment
- Heavy cleated rubber belt
- Self-aligning sealed bearings
- Four point suspension
- Rugged structural steel frame

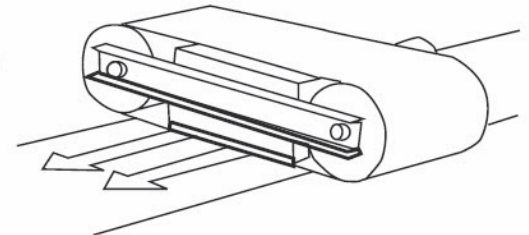
TYPICAL APPLICATIONS PERMANENT AND ELECTROMAGNETIC



Manual Cleaning



In-Line Self-Cleaning



Transverse Self-Cleaning

SUSPENDED SEPARATOR APPLICATION QUESTIONNAIRE

Name: _____ Title: _____ Date: _____
Company: _____
Street: _____ City: _____ State: _____ Zip: _____
Telephone: _____ Fax: _____ E-Mail: _____

Application: _____

Bulk Material: Product

Tons/Hour: _____ Density: _____ Cu. Ft./Hour: _____
Lump Size: _____ Maximum: _____ Minimum: _____
Equipment to be protected: _____
Hours of operation per day: _____

Transportation Method - Belt Conveyor:

Width: _____ Speed: _____ FPM Through Idlers: _____
Max. Burden depth: _____ Head pulley dia.: _____
Conv. incline: _____ Suspension height required: _____

Other Transportation Methods:

Vibratory feed: _____ A. Width: _____ B. Side Height: _____
Oscillatory feed: _____ A. Width: _____ B. Side Height: _____

Self Cleaning: _____ A. Cross-Belt: _____ B. In-Line: _____

Manual Cleaning: _____ A. Over belt: _____ B. Over head pulley: _____

Magnet Type: _____ Permanent: _____ Electro: _____

Tramp Iron: _____ Min. size _____ Max. size _____
Tramp shape: Hex nut _____ Cube _____ Rod _____ Plate _____ Sphere _____
Max. length of tramp iron to be extracted: _____

Site Conditions: Ambient temp: Max: _____ Min: _____
Indoor: _____ Outdoor: _____

A.C. Input: Volts: _____ Phase: _____ Hertz: _____

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