
5 Description of Assets

5.1 Description - General

Dry Magnetic Separators. (DMS)

The assets consists of a pair of two stage DFA-25 Magnetic Double Drum Separators. Supplied by Eriez Magnetics Pty Ltd.

Built date: Completed July 2012.

Order #: IFE000188.

Serial #: 12E37523-A & 12E37523-B.

Dimensions: Height = 5600mm, Width = 3584mm, Depth = 1864mm.

Weight: 12,400kg (each unit).

Drums Size: 0914mm Diameter, 3048mm Width.

Motors: 3 Helical geared motors: (1) 3KW x 12 RPM, (2) 11KW x 53 to 113 RPM.

Drive: Variable speed, 53 – 113 RPM, VSD Controlled.

Drum Liner: 3 THK. Linatex.

Capacity: Capacity per foot (300mm) of magnetic width varies from approximately 5 TPH to 40 TPH (4.5 to 36 MTPH).

Application: Magnetic drums with high peripheral shell speeds were developed to satisfy a need for a dry magnetic separator capable of processing large volumes of relatively fine ferromagnetic particles (-1") (-25mm).

The DF High Speed Drum is a highly efficient unit for processing large volumes of material and producing high grade concentrates or removing very fine highly magnetic particles for purification.

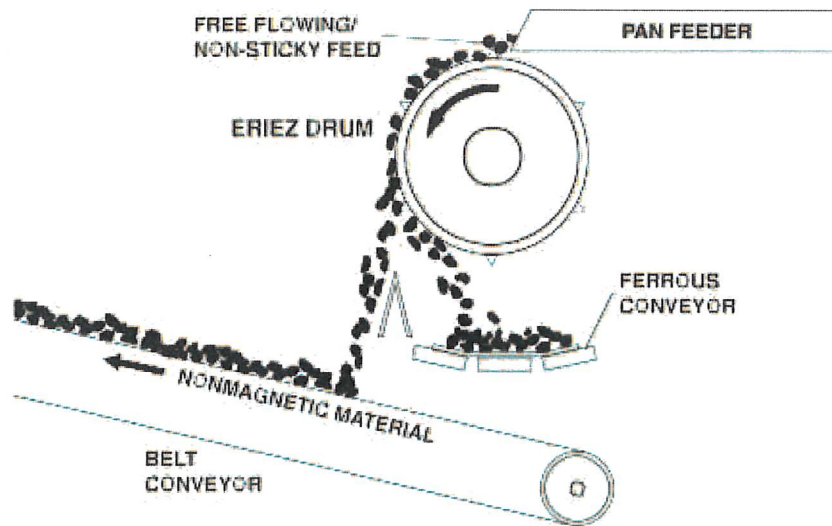
Eriez DF High Speed Drum Separator consists of a rotating drum shell within which is a permanent magnetic element attached to a stationary support and shaft. The magnetic element covers a 210° arc. Depending on the application the drums are furnished with an A10, A25, or A50 agitating magnetic element or with an R radial non-agitating magnetic element. A 1-1 1/2" (38mm) diameter hole is drilled through the shaft at the side opposite the motor drive for positioning of the magnetic element.

The shell is made from 1/8" (3mm) thick #304 stainless steel and has a 1/8" (3mm) thick abrasion resistant rubber liner. Drum heads are high strength aluminum alloy castings. Bearings are completely sealed oversized antifriction type for durability and trouble free operation.

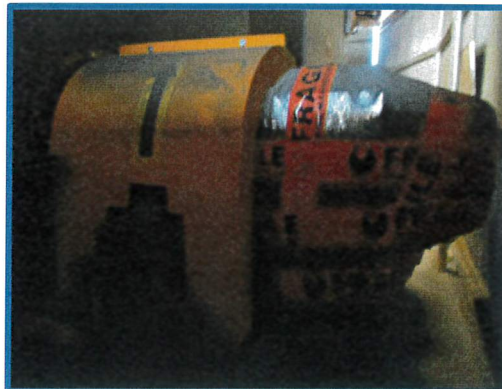
A rectangular shaped dust tight housing with provision for dust collector connections is furnished within a heavy steel angle iron superstructure. Housing end panels have 1/4" (6mm) thick abrasion resistant rubber lining to reduce wear. An adjustable splitter is furnished to separate the magnetic and nonmagnetic fractions.

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Typical Dry Drum Separator Flow Chart.



Inspection Photographs



Description – DMS Technical Drawings

