

# Installation, Operation and Maintenance Instructions



## PLATE MAGNETS

**ERIEZ MAGNETICS** HEADQUARTERS: 2200 ASBURY ROAD, ERIE, PA 16506-1402 U.S.A.  
*WORLD AUTHORITY IN SEPARATION TECHNOLOGIES*

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# Introduction

This manual details the proper steps for installing the Eriez Plate Magnet.

Careful attention to these Installation Requirements will assure the most efficient and dependable performance of this equipment.

If there are any questions or comments about the manual, please call the factory at 814/835-6000 for plate magnet assistance.



## **CAUTION - STRONG MAGNET**

This equipment includes one or more extremely powerful magnetic circuits. The magnetic field may be much stronger than the Earth's background field at a distance several times the largest dimension of the equipment.

- If you use a heart pacemaker or similar device you must never approach the equipment because your device may malfunction in the magnetic field, with consequences up to and including death.
- To avoid serious pinch-type injuries caused by objects attracted to the magnet, keep all steel and iron objects well away from the equipment. Do not allow hands, fingers, and other body parts to be caught between the equipment and "workpiece" being lifted.
- Keep credit cards, computer disks, and other magnetic storage devices away from the equipment because magnetically stored information may be corrupted by the magnetic field.
- Keep electronic devices, such as computers or monitors, away from the equipment because exposure to the magnetic field may result in malfunction or permanent damage to such devices.

Contact Eriez if you have a question regarding these precautions.

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## **CAUTION**

Safety labels must be affixed to this product. Should the safety label(s) be damaged, dislodged or removed, contact Eriez for replacement.

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# Installation Instructions

## Installation Cautions

**DO NOT** weld near magnet or allow high voltage electrical cable to drape over plate.

**DO NOT** drill flange or remove weld from edge of rare earth model plate magnet. Plate is hermetically sealed at the factory.

**DO NOT** expose to heat above 150°F (65°C).\*

**DO NOT** drop or allow a sharp jarring contact with another object.

**DO NOT** allow watches and credit cards in the installation area.

**DO NOT** allow magnet near computers, magnetic information storage items or TV screens (monitors) while in transit.

NOTE: Installation of a plate magnet in a carbon steel (magnetic) chute may cause safety as well as functional problems. Contact Eriez for assistance.

\* Unless otherwise specified on order acknowledgement.

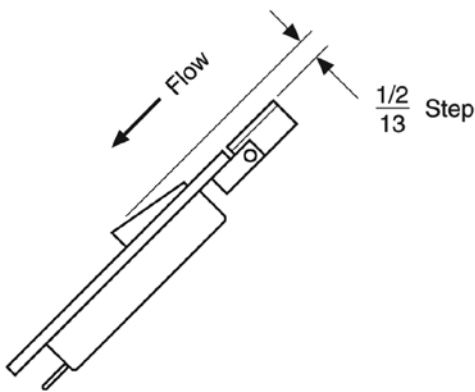
## Installation In a Chute

The magnet should be installed with the step at a right angle to material flow, like a “ski jump”. The best location is near the top of the chute so that material being cleaned will not have attained its maximum velocity. The location should be accessible for frequent cleaning.

Series SD flat face magnets have a nominal (purchased) face width and a 3/4-inch (19 mm) gasket flange. Cut an opening in the chute to this nominal width. Cut the opening along the length of chute per magnet model, as listed below.

During layout, locate the hinge upstream and the latch downstream. Hinges extend 1-5/8 inches (41 mm) from the magnet flange, or 2-3/8 inches (60 mm) beyond the required cutout in the ductwork. The magnet latch requires a 13/32-inch (10 mm) diameter hole centered 1-1/2 inches (38 mm) below the cutout for smaller size plate magnets. Larger plates require two holes 1-1/2 inches (38 mm) below and 3 inches (76 mm) from each corner of the cutout.

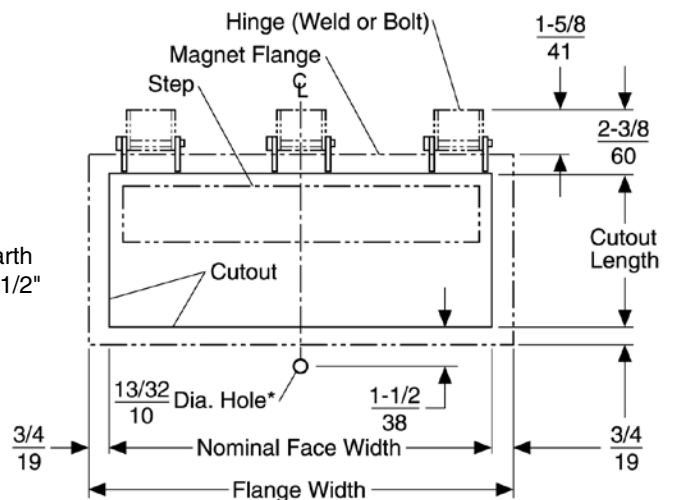
**FIGURE 1. SIDE VIEW**



**Model**  
 Super Power 7" (178 mm)  
 Maxi Power 10" (254 mm)  
 Xtreme Rare Earth & Rare Earth 5-1/2" (140 mm)

INCHES  
 MILLIMETERS

**FIGURE 2. TOP VIEW**



\*See Instructions for Larger Magnets

# Installation Instructions (cont.)

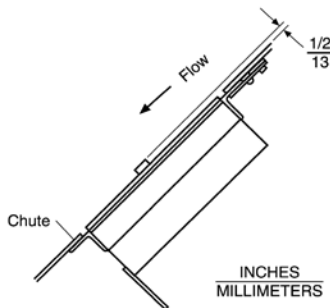
# Maintenance

## Brute Series Plate Magnets

Brutes and Super Brutes have a 2-inch (51 mm) gasket flange. Cut an opening in the chute to the nominal width plus 1/8-inch (3 mm). Cut the opening along the length of chute per Figure 3.

During layout, locate the hinge upstream and the latch downstream. Hinges extend 2-1/8 inches (54 mm) from the magnet flange, or 4 inches (102 mm) beyond the required cutout in the ductwork. The magnet latch requires a 13/32-inch (10 mm) diameter hole centered 2-1/2 inches (64 mm) below and 3 inches (76 mm) from each corner of the cutout.

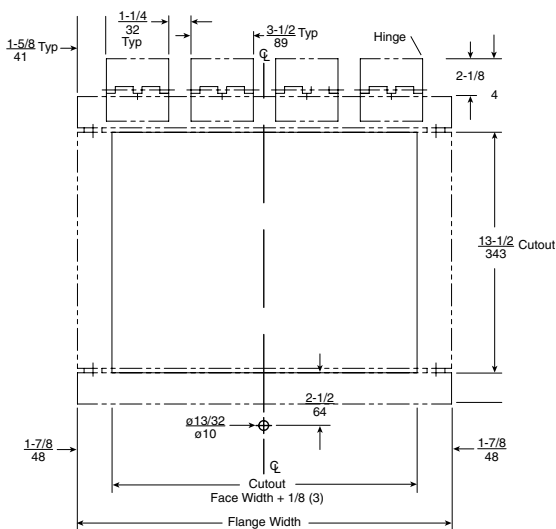
**FIGURE 3. SIDE VIEW**



### Model

Brute & SuperBrute

**FIGURE 4. TOP VIEW**



Eriez Plate Magnets require no maintenance except periodic removal of accumulated tramp iron from their face.

The more accumulated tramp iron is removed from the magnet face, the more effective will be its performance. If iron is allowed to accumulate on the face of the magnet in excessive amounts, a percentage of the magnetic lines of force will be shorted out and the magnet will not work at top efficiency.

**Do not attempt to remove cover** from Plate Magnets. These covers are permanently attached and their removal could upset a carefully engineered magnetic circuit which could only be repaired by returning the unit to our factory for rebuilding and recharging.

Repair, alteration or disassembly of this magnetic equipment in the field without written authorization and instructions by Eriez Manufacturing Co. nullifies the responsibility and guarantee of the manufacturer.



## World Authority in Separation Technologies

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