

Installation, Operation and Maintenance Instructions



PERMANENT NON-ELECTRIC MAGNETIC BELT CLEANERS

ERIEZ MAGNETICS HEADQUARTERS: 2200 ASBURY ROAD, P.O. BOX 10608, ERIE, PA 16514-0608 U.S.A.
WORLD AUTHORITY IN ADVANCED TECHNOLOGY FOR MAGNETIC, VIBRATORY and METAL DETECTION APPLICATIONS

Introduction

This manual details the proper steps for installing the Eriez Permanent Non-Electric Magnetic Belt Cleaners.

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 Magnetic Belt Cleaner assistance.

CAUTION

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

Construction

The Eriez Magnetic Belt Cleaner consists of a permanent magnet encased in a non-magnetic stainless steel cover and welded to a three-inch structural steel channel. A steel barrier strip is welded to the top of the magnet cover to assure even retention of the cleaning medium -- a charge of soft, pliable, fine steel chips applied to the top of the magnet in front of the barrier strip and held firmly in place by the magnetic force.

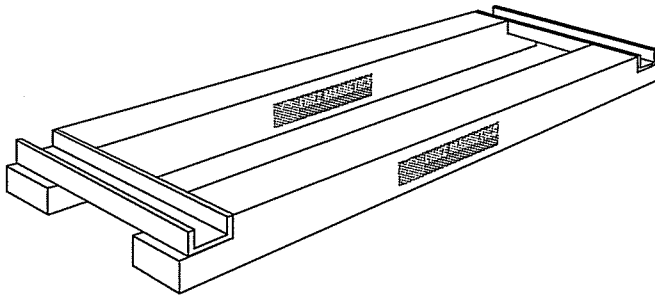


Figure 1. Heavy Duty Model MBC-300. Two standard models joined by two-inch channel.

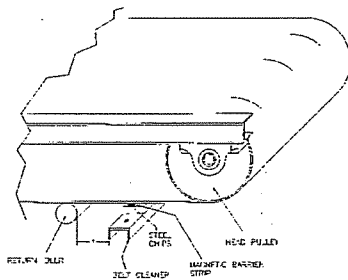
BENEFITS

- Unit is permanent...never needs replacing.
- Provides continuous cleaning without maintenance.
- No periodic adjustments of springs, wiper blades or brushes.
- Simple design adapts to any belt conveyor.
- Minimum space required for installation.
- No auxiliary power needed.
- Low initial cost...no replacement costs.

LIMITATIONS

Cannot be used with belts that have magnetic steel lacing; with cleated belts; with viscous or adhesive materials; or in sanitary applications.

Operation



The cleaner is mounted as close as possible without touching beneath the return run of the belt, behind the discharge of the pulley and about three inches (75 mm) in front of the first return idler. The steel chip charge is added to the top of the cleaner so that it presses gently against the belt across its entire width.

As the belt travels across the mound of chips, it is gently brushed clean. Because the soft steel chips

are attached to the belt cleaner magnetically, they form a flexible mass which conforms to the contours of the belt. If some of the belt contaminants are ferrous, the brushing action will release them from the belt surface and they will become part of the magnetic mass of the cleaner. The movement of the belt prevents excessive buildup and constant replenishment of the magnetic mass assures an even, slight pressure against the belt at all times. With nonferrous materials, the action is much the same. The fine material being removed is entrapped in the pliable mass or chips and aids in the cleaning process.

Cleaners are sized two inches (50 mm) wider than the belt to compensate for belt tracking, and the steel channel holding the magnet is eight inches (200 mm) more than belt width to allow for easy installation.

Dimensions

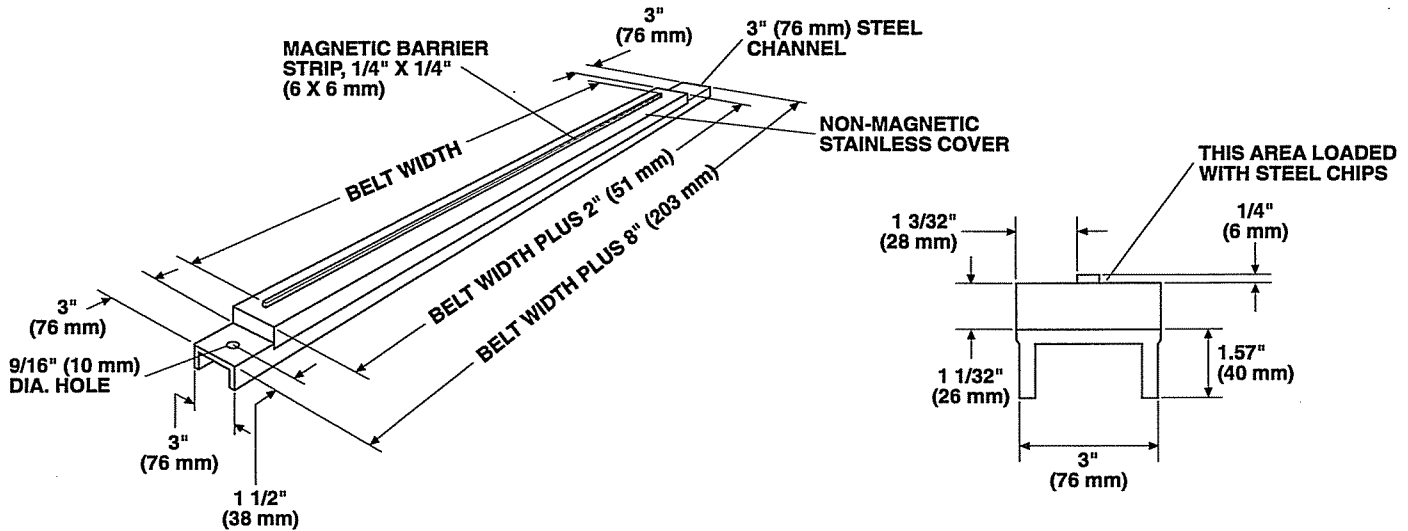


Figure 2. Standard Model MBC-150

Listed below are dimensions and approximate shipping weights of both Standard and Heavy-Duty Models for all standard width belts. For sizes not listed use next wider unit. For belts 48 inches (1220 mm) and wider, only the Heavy-Duty Model is recommended.

Standard Model MBC-150

Belt Width		Cleaner Width		Shipping Weight	
in	mm	in	mm	lb	kg
8	203	16	406	10	4.5
12	305	20	508	15	6.8
16	408	24	610	20	9
18	457	26	660	23	10.4
20	508	28	711	25	11.4
24	610	32	813	30	13.6
30	762	38	965	38	17.3
36	914	44	1118	46	20.9
42	1067	50	1270	53	24

Heavy-Duty Model MBC-300

Belt Width		Cleaner Width		Shipping Weight	
in	mm	in	mm	lb	kg
8	203	16	406	18	8.2
12	305	20	508	27	12.3
16	406	24	610	36	16.3
18	457	26	660	41	18.6
20	508	28	711	45	20.4
24	610	32	813	54	24.5
30	762	38	965	68	30.9
36	914	44	1118	81	36.8
42	1067	50	1270	95	43.1
48	1219	56	1422	108	49.0
54	1372	62	1575	122	55.4
60	1524	68	1727	135	61.3
66	1676	74	1880	149	67.6
72	1829	80	2032	162	73.5
80	2032	88	2235	180	81.7
86	2184	94	2588	194	88.1



World Authority in Advanced Technology for Magnetic, Vibratory and Metal Detection Applications

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