

ACTIVATED ROLLER BELT™ SORTER - FACT SHEET

DEFINITION

A low to mid-speed sorter employing Intralox's patented Activated Roller Belting™, a modular plastic belt with embedded rollers that are spaced 2" apart and extend above and below the surface of the belt. Packages are diverted by actuating a carry-way that causes the angled rollers in the belt to spin, thus sending the package down a spur.



Particularly well suited for:

- Cartons
- Small, light articles, such as CD, DVD cases.
- Heavy articles, up to 75 lbs./sq.ft.
- Applications where divert zones must be tightly spaced.
- Fragile or delicate articles, such as glass.
- Articles with grab-points, such as strapped newspaper bundles.
- Wash-down environments (stainless steel).

STYLES

Activated Roller Belt™ may contain rollers set at 45° or 60° angles. Sorters may be left-hand or right-hand. Bidirectional sorting is also possible, using an Activated Roller Belt™ that has rollers alternately facing left and right across the width. Bidirectional sorters double the minimum package size requirement, because activated rollers in the belt will be spaced 4" apart across the width of the sorter.

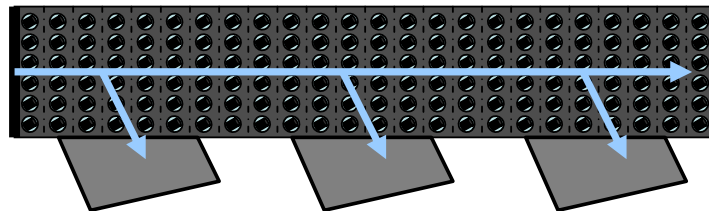


Figure 1: 30° Activated Roller Belt™ Sorter (right-handed)

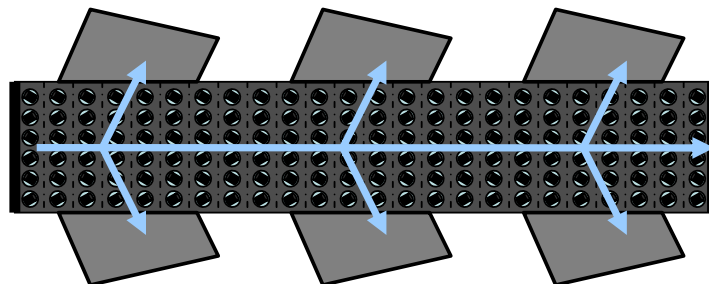


Figure 2: 45° Activated Roller Belt™ Sorter (bidirectional)

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PACKAGE TYPES

Packages with rigid, uniform, flat bottoms are best. Examples of packages that work well are: corrugated boxes; lithograph packaging; tightly packed polybags; polybags containing flat contents; shrink-wrapped items with flat bottoms; large envelopes; CD/DVD cases; strapped bundles of magazines; books; tires; plastic trays and totes without large chines. Soft-sided packages, packages with non-uniform bottom surfaces that conform to the roller pattern, and loosely wrapped packages are not recommended. Omni Metalcraft Corp. has experience with a wide range of package types, contact customer service if there are questions regarding applicability or performance of a certain package type.

PACKAGE SIZES

Minimum package width = 4"; bidirectional = 8"

Maximum package width = practically unlimited, dependent on width of divert opening

Minimum package length = 4"; bidirectional = 8"

Maximum package length = practically unlimited, dependent on width of divert opening

PACKAGE ORIENTATION

Orientation with length in the direction of flow is generally recommended though not required.

GAP REQUIRED BETWEEN PACKAGES

Minimum gap between packages ranges between 12"- 36", depending on the size of the packages to be sorted.

SORTER DIMENSIONS

Maximum sorter length = 400'

Note: Based on average case size of 16", max weight 40 lbs; 30: wide sorter.

Sorter width is function of belt width and equipment design.

Minimum belt width = 8"; bidirectional = 12"

Maximum belt width = practically unlimited, e.g., 60" is possible

Width increments = 2"

SORTER SPEED/RATE

Maximum belt speed = 350 fpm

Maximum rate (18" carton) = 90 cpm

OPERATING ENVIRONMENT

Minimum Temperature = 32° F (0° C)

If the belt surface is wet, sort accuracy may diminish. Lubricous fluids will have a larger affect. Some chemicals may react with or weaken Activated Roller Belt™. Contact customer service for information.

SPECIAL CONSIDERATIONS

Single vs. Dual Operation

Bidirectional sorters can accommodate articles down to 8" width. To implement bidirectional sorting of small articles down to 4" width, a sorter can be configured with an Activated Roller Belt™ that has half its width facing left and the other half facing right. Product can be inducted and pre-sorted to the left side or right side using an Activated Roller Belt™ Switch at the in-feed to the sorter.