

# PROSORT 1100MS

High-Speed Sortation Conveyor (Small Item)

The ProSort MS is designed to sort products at a 30-degree angle where higher speeds and close divert centers are required. Products are transported on anodized aluminum slats where at a predetermined location, divert shoes move diagonally across the conveyor to push the product onto a take-away line. The ProSort 1100 family of sorters is designed for high-speed applications where product diverting needs to be both positive and gentle.

- 30" Divert Centers
- Dual Diverts
- High Sort Rates
- Sorts Small, Lightweight Packages
- Anodized Aluminum Slats



Conveyor shown in green with optional supports

Standard color options:



| Sorter Overall Width "OAW" | Sorter Between Rail | Induction Bed Width "OAW" | Conveyor Sections |           |        |           |             |           |            |           |            |           |
|----------------------------|---------------------|---------------------------|-------------------|-----------|--------|-----------|-------------|-----------|------------|-----------|------------|-----------|
|                            |                     |                           | Drive             |           | Tail   |           | Divert 120" |           | Divert 90" |           | Divert 60" |           |
|                            |                     |                           | Length            | Wt (lbs.) | Length | Wt (lbs.) | Length      | Wt (lbs.) | Length     | Wt (lbs.) | Length     | Wt (lbs.) |
| Dual Sided Diverts         |                     |                           |                   |           |        |           |             |           |            |           |            |           |
| 38.25"                     | 35.25"              | 24"                       | 48"               | 893       | 30"    | 606       | 120"        | 1340      | 90"        | 1005      | 60"        | 670       |

## Standard Specifications - Induction Conveyor

**BELT** – Black, high-grip, longitudinal groove with high-speed lacing, belt width is 5 in. less than overall width.

**BED** – 12 ga. galvanized slider pan mounted in 6 1/2 in. x 12 ga. painted formed steel channel frame.

**INDUCT DRIVE** – Timing belt driven at same speed as sorter. The drive pulley is incorporated into the sorter tail assembly. Access holes designed into side plate for ease of pulley removal.

**DRIVE PULLEY** – 8 in. dia. with 1 11/16 in. dia. shaft at bearings.

**TAKE-UP PULLEY** – 6 in. dia. with 1 3/16 in. dia. shaft at bearings; machine crowned.

**TAIL PULLEY** – 2 1/4 in. dia.; machine crowned and easily removable.

**TAKE-UP** – Take-up in drive provides 16 in. of belt take-up.

**BEARINGS** – Sealed, pre-lubricated, self-aligning ball bearings on drive.

**GAURD RAILS** – Fixed channel guard rail available.

# PROSORT MS

## Standard Specifications

**INTERMEDIATE** – 17 1/8 in. deep x 1 1/2 in. flange 12 ga. formed steel channel frame; powder-painted with a bolted on aluminum chain support extrusion for a total height of 18 in.

**TAIL BED** – 18 in. deep x 1 1/2 in. channel 7 ga. formed steel channel flange; powder-painted.

**DRIVE SECTION** – 30 or 42 in deep x 4 ga. formed steel channel frame; powder-painted. 42 in. deep drive is needed when length exceeds 210 ft.

**CARRYING CHAIN** – Dual strands of No. 60 pre-lubricated o-ring roller chain with precision bearings and extended pins.

**CHAIN LUBRICATOR** – Installed at infeed end to lubricate carrying chains. Gravity feed with 24VDC on/off switch. Flow control valves to control the amount of oil allowed to flow to each of the brush applicators.

**SLATS** – Anodized aluminum slats supported at each end by bushings and extended chain pins on 1 1/2 in. centers. Slats overlap each other for better product support and to prevent debris from falling into sorter.

**DIVERT SHOES** – Low friction molded base with pusher face. Steel guide pin for switching and ball bearing cam follower for diverting. Located on 3 in. centers.

**SWITCH ASSEMBLY** – Pneumatic or electric operated high speed switch assembly mounted with rubber isolators for quietness. Easily removable for maintenance.

**SMART PROXIMITY SWITCHES** – 24VDC inductive proximity switch. One at each divert. Requires maintained electrical signal for duration of each divert.

**SAFETY PROXES** – Missing shoe prox located on every divert section. Interrupts power to drive motor when these conditions are detected.

**DRIVE** – Shaft mounted gear motor. 230/460V, 3Ph., 60Hz. Horsepower based on speed and length requirements.

**VARIABLE SPEED CONTROLLER** – Provides smooth acceleration of drive motor and speed variations if necessary.

**CONVEYING SPEED** – Determined by application requirements. Up to 415 FPM.

**PACKAGE SIZE** – Minimum 4 in. long. 16 in max width.

**CAPACITY** – Maximum product weight 15 lbs.

**INDUCTION CONVEYOR** – Belt conveyor that is timing belt driven from sorter at same speed as sorter.

**FLOOR SUPPORTS** – Not supplied as standard. See optional equipment.

### PNEUMATIC SWITCH SORTER COMPONENTS:

**AIR REQUIREMENTS** – Free air consumption at 60 PSI equals .002 cu. ft. per divert.

**AIR VALVE** – High speed 24VDC single solenoid 4-way air valve at each divert station.

**AIR FILTER/REGULATOR** – Supplied for main air supply line. 1/2 in. NPT ports. Requires working pressure of 60 PSI.

**AIR PRESSURE SWITCH** – Install in main air line near the last divert switch. Used to detect low air pressure and turn off drive.