

SL1500 Series Standard Line Conveyor System



The SL1500 Standard Line metal detector conveyor system is intended for the inspection of small and medium sized packaged products in both dry and wet environments. It is designed to offer a reliable, standardized conveyor solution at a competitive price.

A pre-defined configuration set and modular design streamlines engineering and production effort, enabling shorter lead times.

Application Flexibility

The SL1500 platform supports the integration of M31R, M33R, M34R, Profile, and Profile Advantage metal detection technologies, allowing the selection of the correct solution for the application.

Ease of Cleaning

The design features quick belt removal and easy access to all surfaces during cleaning cycle. The system is rated to IP65, with option to upgrade to IP69, and has a continuously-welded 304SS tubular frame to

withstand common industrial cleaning agents.

Safe Equipment Design

The system includes Cat-1 safety circuit with emergency stop integrated into electrical and pneumatic circuits. Standard components feature lock-out/tag-out capability.

Ease of Maintenance

The system layout provides easy access to all mechanical and electrical components. Use of readily available components reduces the need for spare part inventory.



Technical Details

| Feature | Specification |
|---------------------------|---|
| Metal Detector Head Model | M31R, M33R, M34R, Profile, or Profile Advantage |
| Customer Product | Packaged customer products up to 20 kg (<44.1 lbs)- no unwrapped or bulk product applications |
| Lane Configuration | Single lane (when configured with an automatic reject mechanism) |
| Conveyor Belt Speed | Fixed conveyor speed, any value within 10-60 m/min (32.8-196.9 ft/min) range |
| Conveyor Drive | Nord (IP65/66) or Leeson (IP69) drive motor, Boston gearbox, Mitsubishi FR-D700 VFD |
| Power Requirement | 1 110V/1Ph, 220V/1Ph, 220V/3Ph, or 480V/3Ph |
| IP Rating | IP65 system ingress protection (head + conveyor) Upgraded ratings available (see Options below) |
| Belt Type | Plastic modular Intralox 900 Series belt with 95 mm (3.7 in) transfer transfer diameter |
| Floor Mounting | Stainless steel leveling pads +/- 50 mm (2 in) |
| Belt Width | 150 mm (5.9 in) to 650 mm (25.6 in), in 50 mm (2 in) increments |
| Belt Height | 700 mm (27.6 in) minimum height (800 mm (31.5 in) w/ casters) to 1100 mm (43.3 in) maximum height (Flat/Level orientation only) |
| System Length | 1200 mm (47.2 in) minimum length to 2200 mm (86.3 in) maximum length |
| Reject Type | Dry Contacts, Stop on Detect, Air Blast (<2 kg) (4.4 lbs), Pusher (<10 kg (22 lbs) or <30 kg (66.1 lbs)), or Overhead Sweep (Uni or Bi-Directional) |
| Safety Guards | Standard plastic safety guarding |
| Event Reset Method | Push button reset (if applicable) to clear any system fault before the conveyor can be restarted |

Available Options

| Option | Description |
|----------------------|---|
| Variable Belt Speed | Variable conveyor speed, "3x limit" within 10-60 m/min (32.8-196.9 ft/min) range (i.e. 15-45 m/min (49.2-147.6 ft/min), etc.) |
| IP Rating Upgrade | IP66 or IP69 system ingress protection (head + conveyor) |
| Product Guides | Adjustable product guides (infeed through MD aperture only) |
| Lockable Casters | Stainless steel lockable casters +/- 50 mm (2 in) |
| Reject Bin | 304SS or Hybrid (SS and Plastic) Reject Bin |
| Bin Full Warning | Belt stops upon bin full condition with choice of one - amber beacon, alarm, beacon/alarm |
| Bin Open Warning | Electronic bin lock with "bin open" timer with choice of one - HMI warning, red beacon, alarm, beacon/alarm |
| Reject Confirmation | Belt stops if product is not rejected with choice of one - red beacon, alarm, beacon/alarm |
| Detection Indicator | MD contamination warning with choice of one - red beacon, alarm, beacon/alarm |
| Air Failure Warning | Belt stops upon low air condition with choice of one - blue beacon, alarm, beacon/alarm |
| Head Fault Warning | Belt stops upon any head fault with choice of one - red beacon, alarm, beacon/alarm |
| Performance Test Due | MD head performance test reminder with choice of one - white beacon, alarm, beacon/alarm |
| Key Reset Switch | Upgrade from push button reset to key reset switch |
| UL Approval | cULus 508A listed industrial control panel |

*Customization from above standard product options is not allowed on SL1500 Standard Line MD conveyor system

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Subject to technical changes

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