



SIMPLIMATIC
AUTOMATION

Cimtrack Electronics



Assembly Automation Product Catalog

experience

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I. Model 2011 Edge Belt Connecting Conveyor



Shown with optional equipment

Standard Features

- High-speed DC stepper motor conveyor
- Adjustable conveyor speed with two presets
- Hand crank width adjust
- Emergency Stop, Reset, Inspect, and Release Controls
- ESD wrist strap receptacles
- Allen-Bradley PLC

Application

The Model 2011 Edge Belt Connecting Conveyors are used to convey a product by its edges between manufacturing processes. It is designed to run at very high speeds with minimal maintenance and supports a high-degree of customization. Edge Belt Connecting Conveyors are available in any length and in numerous drive configurations.

Typical applications include:

- Conveyance of PCB's, Auer boats, and JEDEC trays between manufacturing processes
- Buffering and metering
- Acting as a platform for inspection, product ID, manual placement, and other processes

Available Options

- Inspect Controls
- Power width control
- Microscope mount
- Length
- Number and length of drive sections
- Belt Width
- Tooled width adjust
- Board clamps, lifts, locators, and stops
- Die-cast legs
- CE compliance

We welcome custom applications.

Additional Benefits

- Zero-gap edge guides eliminate the danger of board becoming jammed under the edge guide.
- Precision-cut, proprietary aluminum extrusion frame.
- Extruded frame and conveyor rails allow accessories to be easily added and positioned.
- All Edge Belt Connecting Conveyors are bi-directional.
- High-Speed DC stepper motors can move a five pound product at 96 ft./min.
- Modular conveyor rails allow the length of the conveyor to be significantly increased or decreased at a minimal cost.

II. Model 2021 Edge Belt Inspection Conveyor



Shown with optional equipment

Standard Features

- High-speed DC stepper motor conveyor
- Adjustable conveyor speed with two presets
- Hand crank width adjust
- Emergency Stop, Reset, Inspect, and Release Controls
- ESD wrist strap receptacles
- Allen-Bradley PLC

Application

The Model 2021 Edge Belt Inspection Conveyors allow operators to select products to be stopped for inspection during a manufacturing process. Product may or may not be removed for the inspection process and will remain stopped until it is released by an operator or other signal. The unit may also run in pass-through mode.

Each unit is designed to run at very high speeds with minimal maintenance and supports a high-degree of customization. Edge Belt Inspection Conveyors are available in any length and in numerous drive configurations.

Typical applications include:

- Conveyance of PCB's, Auer boats, and JEDEC trays between manufacturing processes
- Buffering and metering
- Acting as a platform for inspection, product ID, manual placement, and other processes

Available Options


- Inspect Controls
- Power width control
- Microscope mount
- Length
- Number and length of drive sections
- Belt Width
- Tooled width adjust
- Board clamps, lifts, locators, and stops
- Die-cast legs
- CE compliance

We welcome custom applications.

Additional Benefits

- Zero-gap edge guides eliminate the danger of board becoming jammed under the edge guide.
- Precision-cut, proprietary aluminum extrusion frame.
- Extruded frame and conveyor rails allow accessories to be easily added and positioned.
- All Edge Belt Connecting Conveyors are bi-directional.
- High-Speed DC stepper motors can move a five pound product at 96 ft./min.
- Modular conveyor rails allow the length of the conveyor to be significantly increased or decreased at a minimal cost.
- No driveshafts to align or guard.

III. Model 2031 Edge Belt Workstation Conveyor



Standard Features

- Adjustable footrest, scalloped tables, accessory frame, overhead lighting, an dparts bin rack
- ESD conveyor belts
- Hand crank width adjust
- Emergency Stop, Reset and Inspect Controls
- ESD wrist strap receptacles
- Zero-gap edge guide
- Allen-Bradley PLC

Shown with optional equipment

Application

The Model 2031 Edge Belt Workstation is used to automatically convey products by their edges through manual assembly processes. They are designed to maximize ergonomic comfort for the operator while providing a flexible assembly platform. Edge Belt Workstations are available in any length and in numerous drive and product flow configurations.

Typical applications include:

- Manual or semi-automatic inspection of PCBs, Auer boats, and JEDEC tray products.
- Rework
- Manual placement stations

Available Options

- Power width control
- Length
- Number and length of operator positions
- Belt Width (3mm or 5mm)
- Tooled width adjust
- Board clamps, lifts, locators, and stops
- Dual-sided workstations
- Pallet take-away - separate conveyor inside unit allows operators to place empty pallets there for removal
- CE compliance

We welcome custom applications.

Additional Benefits

- Over 35 different workstation accessories.
- Products can be automatically indexed, paced, or operator released.
- Zero-gap edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Precision-cut proprietary aluminum extrusion frame.
- All Model 2011 Edge Belt Conveyors are bi-directional.
- High-speed DC stepper motors can move a five pound product at 96 ft./min.

IV. Model 2041 Turn Unit



Shown with optional equipment

Standard Features

- Pneumatic, motorized, or closed-loop servo positioning system
- High-speed DC stepper motor conveyor
- Interlocked cover with alarm
- User-configurable routing options
- ESD wrist strap receptacles
- Hand crank width adjust

Application

The Model 2041 series Turn units are capable of rotating product 270° about a vertical axis. Depending on the type of rotating mechanism, product can be introduced or discharged from any side, including same side in/out transfers.

Typical applications include:

- Ninety-degree turns
- Production line merging or diverging
- Good board/bad board rotating
- Changes in fixed rail orientation

Available Options

- Power width control - motorized conveyor width, controlled by thumbwheel
- Product scanning
- Dual Lane
- Belt Width - 3mm or 5mm
- Tooled width adjust - requires tools to adjust
- Slide Width Adjust - cam locks on width adjust
- Center-justified width adjust
- CE compliance

We welcome custom applications.

Additional Benefits

- Turn units can be reconfigured for different material handling routes.
- Hinged doors, slide-mounted electrical panel, top access door, and easily removable vanity covers improve access to the machine.
- Zero-clearance guides eliminate the danger of boards becoming jammed under the edge guide.
- Standard Allen-Bradley controller system supports a touch screen interface and can be expanded to include network capability.

V. Model 2052 Board Inverter



Standard Features

- Closed-loop servo invert mechanism
- High-speed DC stepper motor conveyor
- One-piece, machined aluminum carriage plates
- Hand crank width adjust
- Low-backlash invert mechanism
- Bidirectional conveyor

Application

The Model 2052 Board Inverter is capable of rotating products 180° about a horizontal axis. The system can also pass product through without inverting; accept, invert, and discharge from the same side; or invert and pass. Invert cycle time is approximately four seconds.

Typical applications include:

- In-line transition from top side to bottom side manufacturing
- Flip and return for islands of automation, such as conformal coating

Optional Features

- Touchscreen User Interface
- Power width control - motorized conveyor width, set with thumbwheel indicator. Ideal for high-mix environments.
- Dual Lane Conveyors - adds second lane for increased throughput.
- Tooled Width Adjust - secures adjustable rail with tooled brackets. Lowers cost and works well in low-mix production.
- Large frame version - increases capacity to 18" x 24" board (450mm x 600mm)
- Belt Width - 3mm or 5mm
- CE compliance - addresses electrical filtering, frame grounding, and other CE requirements.

We welcome custom applications.

Additional Benefits

- Servo controlled invert system allows the user to fine-tune the invert speed and stop location.
- Dual belt drive system holds product from the top and bottom, ensuring the product is successfully transferred and safely inverted.
- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Standard Allen-Bradley controller system can be expanded to include network capability.
- Optional powered width control feature allows the operator to specify an exact conveyor width by entering it via thumbwheel.

VI. Model 2072 Servo Side Shuttle



Standard Features

- High-speed DC stepper motor conveyor
- Adjustable conveyor speed with two presets
- Hand crank width adjust
- Closed-loop servo shuttle motion
- Six teach positions
- Same side in/out transfers
- Allen-Bradley PLC

Application

The Servo Side Shuttle is used to convey product perpendicularly to the process flow where speed and routing options are primary concerns. Up to six positions can be taught, each capable of bidirectional transfer.

Typical applications include:

- Conveyance of PCB' s, Auer boats, and JEDEC trays between manufacturing processes
- Buffering and metering
- Acting as a platform for inspection, product ID, manual placement, and other processes

Available Options

- Inspect Controls
- Power width control
- Microscope mount
- Length
- Number and length of drive sections
- Belt Width
- Tooled width adjust
- Board clamps, lifts, locators, and stops
- Die-cast legs
- CE compliance

We welcome custom applications.

Additional Benefits

VII. Model 2080 FIFO/LIFO Buffer Series



Standard Features

- Closed-loop servo positioning
- High-speed DC stepper motor conveyor
- Individual belt sections
- One-piece, machined aluminum carriage plates
- Patented conveyor drive assembly
- Hand crank width adjust
- Typical applications include:
 - In-line buffering before bottlenecks or inconsistent processes, like manual assembly areas
 - Evacuating reflow ovens if post-reflow processes slow or stop
- Good board/bad board sorting
- Same side in/out buffering

Application

The Model 2080 FIFO/LIFO Buffer series is designed to help balance the flow of your production line by temporarily storing work in progress. The 2080 series is available in 10, 20, 30, and 40 slot capacities, each able to hold product from 2" x 3" to 18" x 22" in size. The carriage is designed to take very heavy loads, while the zero-clearance conveyor guides can accommodate very thin product.

The buffer can be operated in LIFO or FIFO mode, depending on the needs of the user.

Typical applications include:

- In-line buffering before bottlenecks or inconsistent processes, like manual assembly areas
- Evacuating reflow ovens if post-reflow processes slow or stop
- Good board/bad board sorting
- Same side in/out buffering

Available Options

- Power Width Control—motorized conveyor width, controlled by thumbwheel
- Tooled Width Adjust—requires tools to adjust
- Large frame version—increases footprint, handles 18" x 24" board
- Cooling fans
- Dual Lane
- Uninterruptible power supply (UPS)
- 10-, 20-, 30-, and 40-slot capacities
- CE compliance

We also welcome custom requirements.

Additional Benefits

- Standard upline inhibit software allows the FIFO/LIFO Buffer to regulate transfers at other machines, which can help balance the line and ensures the buffer is never filled.
- Patented floating conveyor drive assembly is reliable and easy to set up.
- Teach positions, carriage pitch, inhibit values, board capacity, and "first slot" variables are easily programmed at the user interface
- One-piece aluminum carriage plates and closed-loop feedback in the carriage positioning system ensure precise and repeatable transfers.
- Pass-through, stop input, and stop output modes.
- Modular conveyor rails allow the length of the conveyor to be significantly increased or decreased at a minimal cost.

VIII. Model 2111 Wave Solder Loader



Standard Features

- Rodless pneumatic lift cylinder
- High-speed DC stepper motor conveyor
- Adjustable infeed and discharge elevations
- Adjustable incline angle
- Hand crank width adjust
- SMEMA 1.2 compliant

Application

The Model 2110 Wave Solder Loader/Unloader was specifically designed to transfer product to or from a horizontal production line to the 6° incline of most wave solders. The infeed and discharge elevation are a no-charge option and can be altered on-site with small modifications. The incline angle is also adjustable.

Typical applications include:

- Transitioning from a 37" or 32" line height to an inclining wave solder conveyor
- Returning an inclining line to horizontal

Available Options

- Infeed and discharge elevations
- Incline angle
- Power Width Control
- Dual Lane
- Right-to-left transfer
- Rear fixed rail
- Tooled Width Adjust—requires tools to adjust
- Slide Width Adjust—cam locks on width adjust
- CE compliance
- Uninterruptible Power Supply (UPS)

Additional Benefits

- Combining the tilting and vertical motion saves space and ensures a positive transfer to the wave solder conveyor.
- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Infeed and discharge heights can be changed by relocating their respective hard stops (in some cases, modifications to the vanity covers may be required).
- Standard Allen-Bradley controller system supports a touch screen interface and can be expanded to include network capability.
- Over-sized linear guide and carriage construction limits carriage deflection, even under heavy loads.

IX. Model 2133L Magazine Loader



Standard Features

- Motorized ball-screw carriage system
- High-speed DC stepper motor conveyor
- Five magazine capacity
- Hand crank width adjust
- Touchscreen interface
- Top and bottom pneumatic magazine clamps

Application

The Model 2131L Magazine Loader is designed to load product into a magazine at the end of a manufacturing line. With standard Simplimatic magazines, the machine can load up to 250 populated boards without operator intervention. The machine can also be customized to handle most third-party magazines types.

Typical applications include:

- Removing populated product into a production line, especially where magazines are used elsewhere for WIP management
- Handling large, delicate, or large volumes of product

Available Options

- Inline or ninety-degree magazine conveyor orientation (see “ Application” section)
- Power Width Control
- Good board/bad board magazine sorting
- Large board version—up to 22” x 28”
- Custom magazine handling
- Tooled Width Adjust—requires tools to adjust
- Magazine Carts
- Conveyorized magazine racks
- CE compliance

We welcome custom applications.

Additional Benefits

- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Load and unload positions can be taught at the touchscreen, which also provides diagnostic and troubleshooting information.
- Closed-loop servo positioning system delivers a high degree of precision and repeatability.
- Electromagnetic ball screw brake helps maintain a high degree of repeatability.
- Optional, adjustable, low-backpressure magazine conveyors deliver a smooth and reliable magazine transfer.
- Pneumatic locking cylinders on the carriage secure both the top and bottom of the magazine, which reduces transfer errors due to slightly out-of-square magazines.

X. Model 2133U Magazine Unloader



Shown with optional equipment

Standard Features

- Motorized ball screw positioning system
- High-speed DC stepper motor conveyor
- Five magazine capacity
- Hand crank width adjust
- Touchscreen interface
- ESD conveyor belts

Application

The Model 2133 Magazine Unloader is designed to introduce product from a magazine onto the beginning of a manufacturing line. With standard Simplimatic magazines, the machine can unload up to 250 populated boards without operator intervention. The machine can also be customized to handle most third-party magazines types.

Typical applications include:

- Introducing populated product into a production line, especially where magazines are used elsewhere for WIP management
- Handling large, delicate, or large volumes of product

Available Options

- Inline or ninety-degree magazine conveyor orientation (see “ Application” section)
- Power Width Control
- Right-to-left transfer
- Large board version—up to 22” x 28”
- Custom magazine handling
- Tooled Width Adjust—requires tools to adjust
- Closed-loop servo positioning
- Motorized magazine conveyors
- CE compliance
- Exit conveyor

Additional Benefits

- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Load and unload positions can be taught at the touchscreen, which also provides diagnostic and troubleshooting information.
- Precision THK linear guides and electromagnetic brake system delivers a high degree of precision and repeatability.
- Adjustable, low-backpressure magazine conveyors deliver a smooth and reliable magazine transfer.
- Pneumatic locking cylinders on the carriage secure both the top and bottom of the magazine, which reduces transfer errors due to slightly out-of-square magazines.

XI. Model 2141 Bare Board Vacuum Loader



Standard Features

- High-speed DC stepper motor conveyor
- Pass-through mode
- Hand crank width adjust
- Expandable and easy-to-adjust vacuum cup array
- Holds 10" stack up to 18" x 20"
- Seven-second cycle time

Application

The Model 2141 Bare Board Loader is designed for introducing unpopulated boards into a high volume, low mix environment. Its high capacity storage bin (20" stack) allows the unit to run unattended for long periods of time. The pneumatic lift design also works well with large board applications or thin boards. Each unit can automatically halt its operation so that other boards may pass through. Average cycle time is four seconds.

Typical applications include:

- Introducing unpopulated product into a production line, especially after a magazine unloader
- Loading particularly large or delicate substrates onto a production line

Available Options

- Power Width Control—motorized conveyor width, controlled by thumbwheel
- Right-to-left transfer
- Auxiliary vacuum cups—help lift larger boards
- Vacuum selector switch—speeds changeover by allowing patterns of vacuum cups to be selected
- Tooled Width Adjust—requires tools to adjust

We welcome custom applications.

Additional Benefits

- Gantry system and conveyor rails are permanently calibrated, ensuring accurate board placement throughout the life of the machine.
- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Step-through mode allows the user to pause at each step of the loading process, which is very helpful during set-up and changeover.
- The vacuum cup array is adjustable without tools and additional vacuum cups can be added to speed changeover or increase the lift capacity, as required.
- Standard Allen-Bradley controller system supports a touch screen interface and can be expanded to include network capability.

XII. Model 2160 Power and Free Conveyor



Standard Features

- DC motor
- Emergency Stop and Reset Controls
- Beveled-edge, low-friction ESD roller chain
- Zero-gap edge guide
- ESD-wrist strap receptacles

Application

The Model 2160 Power and Free Conveyor is a low-backpressure roller chain conveyor used to transport product between manufacturing processes while contacting the product only along its edges (requires 5mm edge clearance). Power and Free conveyors can be used as a simple means of spanning large distances or sophisticated controls, board actuators, and ergonomic workstation accessories can be added.

The low backpressure roller chain allows product to queue on a continuously running conveyor while minimizing friction on the product.

Typical applications include:

- Conveyance of PCBs, pallets, Auer boats, and JEDEC trays between manufacturing processes
- Buffering, indexing, or singulating products
- Acting as a platform for inspection, manual assembly, or cooling

Available Options

- PLC control (required for indexing functions or most operator controls/interfaces)
- Length (3–20 feet)
- Fixed Width
- Light Tower
- Fixed Stop at Discharge End
- Foot Rests, Armrests, and Workstation • Accessories
- Worktables
- Cooling Fan Banks
- Pneumatic Stops and Singulators
- CE compliance

We welcome custom applications.

Additional Benefits

- Zero-gap edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Precision-cut, proprietary aluminum extrusion frame.
- Extruded frame and conveyor rails allow accessories to be easily added and positioned.
- High-speed DC motors can move a five pound product at 66 ft./min.
- Optional pneumatic product stops can be positioned anywhere along the length of the conveyor
- Optional product singulators can segregate a single product from a continuous queue.

XIII. Model 2192U Mini Magazine Unloader



Standard Features

- Motorized ball screw positioning system
- High-speed DC stepper motor conveyor
- 18" x 20" (457mm x 508mm) board capacity
- Hand crank width adjust
- Touchscreen interface
- ESD conveyor belts

Application

The Model 2192U Mini Magazine Unloader is designed to introduce product from a magazine onto the beginning of a manufacturing line. With standard Simplimatic magazines, the machine can unload up to 50 populated boards without operator intervention. The machine can also be customized to handle most third-party magazines types.

Typical applications include:

- Introducing populated product into a production line, especially where magazines are used elsewhere for WIP management
- Handling large or delicate product
- Topside/bottomside production

Available Options

- Power Width Control
- Right-to-left transfer
- Large board version—up to 22" x 28"
- Custom magazine handling
- Tooled Width Adjust—requires tools to adjust
- Closed-loop servo positioning
- CE compliance

Additional Benefits

- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Load and unload positions can be taught at the touchscreen, which also provides diagnostic and troubleshooting information.
- Precision THK linear guides and electromagnetic brake system delivers a high degree of precision and repeatability.

XIV. Model 2210 Single-sided Slide Line

Standard Features



Shown with optional equipment

- Conveying surface inclines 15° towards operator
- Low-friction UHMW product guides
- Precision machined, ESD conveying surface
- Tooled width adjust
- ESD-wrist strap receptacles

Application

The Model 2210 Single-sided Slide Line is a low-backpressure, manual conveyance platform commonly used in manual assembly areas. Product is supported by its edges at 3mm or 5mm exposure by two machined, adjustable UHMW guides and manually passed downline.

Typical applications include:

- Platform for product prep
- Platform for inspection or back-end assembly

Available Options

- Length (4–20 feet)
 - 12- or 24-inch width
 - Foot Rests, Armrests, and Workstation •
- Accessories
- Worktables
 - Louvered Part Bin Racks with Handles
 - Overhead Florescent Lights
 - CE compliance

We welcome custom applications.

Additional Benefits

- Zero-gap edge guides eliminate the danger of product becoming jammed under the edge guide.
- Precision-cut, proprietary aluminum extrusion frame.
- Extruded frame and conveyor rails allow accessories to be easily added and positioned.
- Zero-maintenance design
- Optional workstation accessories can create a comprehensive manual assembly cell

XV. Model 2231 Bare Board Destacker



Standard Features

- High-speed DC stepper motor conveyor
- Pass-through mode
- Hand crank width adjust
- Easy board-thickness adjustment
- Holds 10" stack up to 18" x 20"
- Four-second cycle time

Application

The Model 2231 Stacker/Destacker is a high-speed method of loading and unloading unpopulated boards onto a production line. Each unit can automatically halt its operation so that other boards may pass through.

This is a popular method for high-mix applications, as typically the only changeover is width adjustment.

Typical applications include:

- Introducing unpopulated product into a production line, specially after a magazine unloader
- Removing product from a line, especially before a magazine loader

Available Options

- Power Width Control—motorized conveyor width, controlled by thumbwheel
- Right-to-left transfer
- Tooled Width Adjust—requires tools to adjust
- CE compliance

We welcome custom applications.

Additional Benefits

- Unit can be fully loaded but still allow product to pass through.
- Dual THK linear guides support the moveable tower.
- Automatic cut-off when the width adjust handle is inserted.
- Slide-out electrical panel.
- Accommodating different board thicknesses is as simple as rotating a knob.
- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Standard Allen-Bradley controller system supports a touch screen interface and can be expanded to include network capability.

XVI. Model 2261 Shuttle Gate

Standard Features



Model 2262 shown.

- Closed-loop servo shuttle system
- High-speed DC stepper motor conveyor
- ESD belts
- Hand crank width adjust
- Triple-redundant safety system
- Creates up to a 42-inch (106.7cm) opening

Application

Model 2261 Shuttle Gate allows product to be conveyed across an opening in a production line. This allows operators to pass between machines in a line instead of walking around the end of the line. The shuttle remains retracted until a board is ready to transfer. Average cycle time is seven seconds.

Typical applications include:

- Creating line openings so operators have better access to the factory and production machines
- Allowing for the movement of carts, pallet jacks, or cleaning equipment

Available Options

- Power Width Control
- Dual Lane
- Right-to-left transfer
- Rear fixed rail
- Tooled Width Adjust—requires tools to adjust
- Slide Width Adjust—cam locks on width adjust
- Wireless SMEMA communication—eliminates need for wireway across aisle
- CE compliance
- Uninterruptible Power Supply (UPS)

Additional Benefits

- Optional servo-controlled shuttle mechanism does not rely on positional sensors or hard stops. Instead, the retract and extend positions are easily stored in the software and the closed-loop system ensures they are recalled exactly, every time.
- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Shuttle will extend slowly and retract very quickly, which increases safety while reducing cycle times.
- Pressure sensors on the shuttle, an infrared sensor, and current limit settings protect operators from the shuttle action.
- Standard Allen-Bradley controller system supports a touch screen interface and can be expanded to include network capability.

XVII. Model 2271 Board Elevator



Standard Features

- High-speed DC stepper motor conveyor
- Hand crank width adjust
- High-precision THK linear guides
- Adjustable shocks and load positions
- ESD conveyor belts
- AB PLC

Application

The Model 2271 Board Elevator is designed to accommodate positive or negative elevation changes within a production line. Elevation changes within 16" (41cm) are most common, but the standard unit can accommodate a change of up to 50" (127cm) (longer strokes are available; please inquire).

The product is kept horizontal throughout the handling process. For elevate and tilt units, please see Model 2111 Wave Solder Loader, Model 2091 Drop and Tilt Elevator, and Model 2092 Tilt Conveyor.

Typical applications include:

- Raising or lowering production lines to clear obstructions or wall openings
- Raising or lowering production to facilitate operators at seated workstations

Available Options

- Power Width Control—motorized conveyor width, controlled by thumbwheel
- Right-to-left transfer
- Longer (taller) stroke—please inquire
- Tooled Width Adjust—requires tools to adjust

We welcome custom applications.

Additional Benefits

- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Step-through mode allows the user to pause at each step of the loading process, which is very helpful during set-up and changeover.
- Adjustable stops and shocks allow the elevator positions to be adjusted. Even major changes in load/unload positions can be made by the user.
- Standard Allen-Bradley controller system supports a touch screen interface and can be expanded to include network capability.

XVIII. Model 2390 Product Orientator



Standard Features

- Allen-Bradley PLC control system
- Product singulator
- Hand crank width adjust
- ESD conveyor belts
- Zero-gap edge guide
- Maximum 15-second cycle time

Application

The Model 2390 Product Orientator is used to change the orientation of a product ninety-degrees about a vertical axis. Product can be introduced into the machine in either orientation and can be rotated in either direction.

This action can increase product density within subsequent processes by orienting products so that their shortest dimension is parallel to product flow. If desired, a second unit can rotate the product back to its original orientation.

This machine will accommodate most PCBs, JEDEC trays, and Auer boats.

Available Options

- Power width control
- Belt width
- Tooled width adjust
- Board clamps, lifts, locators, and stops
- CE compliance

We welcome custom applications.

Additional Benefits

- Zero-gap edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Product singulators can automatically segregate a single board from a continuous queue; at the discharge end of an oven, for example.
- Special extended rails allow small products to be conveyed on to or off of conveyors with large diameter idle rollers.
- Stainless steel, articulating guide system will automatically orient products as they enter the unit.
- Safety-interlocked ESD Lexan access cover
- Precision-cut, proprietary aluminum extrusion frame.
- High-speed DC stepper motors and heat-resistant belts can move a five pound product at 96 ft./min.

XIX. Model 2101 Walk-under



Standard Features

- Pneumatic lift system
- High-speed DC stepper motor conveyor
- ESD belts
- Hand crank width adjust
- Multiple buffer sections
- Variable length

Application

Model 2101 Walk-under connecting conveyor allows product to be conveyed over an opening in a production line. This allows operator-equipment to pass between machines in a line instead of around the end of the line.

Typical applications include:

- Creating line openings so operators have better access to the factory and production machines.
- Allowing for the movement of carts, pallet jacks, or cleaning equipment.

Available Options

- Power Width Control
- Dual Lane
- Right-to-left transfer
- Rear fixed rail
- Tooled Width Adjust—requires tools to adjust
- Slide Width Adjust—cam locks on width adjust
- CE compliance
- Uninterruptible Power Supply (UPS)

We welcome custom requirements.

Additional Benefits

- Zero-clearance edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Safety-interlocked access doors
- Rodless-cylinder design is simple, reliable, repeatable, and easy to maintain.
- High-precision THK linear guides
- Standard Allen-Bradley controller system supports a touch screen interface and can be expanded to include network capability

XX. Model 8170 Flat Belt Conveyor

Standard Features



Shown with optional equipment

- DC motor
- Emergency Stop and Reset Controls
- 18" wide, high-friction ESD conveyor belt
- Zero-gap edge guide
- Stainless steel conveyor bed
- Sealed ball bearings

Application

The Model 8170 Flat Belt Conveyor is used to convey products between manufacturing processes while providing full support across the bottom of the product. Flat belt conveyors can be used as a simple means of spanning large distances or sophisticated controls, guidework, and ergonomic workstation accessories can be added.

Flat belt conveyors require little changeover and will handle a variety of product types.

Typical applications include:

- Conveyance of PCBs, pallets, Auer boats, and JEDEC trays between manufacturing processes
- Buffering, indexing, or pacing products
- Acting as a platform for inspection, wave solder discharge, or cooling

Available Options

- PLC control (required for indexing functions or most operator controls/interfaces)
- Length (3–20 feet)
- Width (12" , 18" , or 24" usable width)
- Light Tower
- Fixed Stop at Discharge End
- Foot Rests
- Armrests, worktables, and workstation accs.
- Incline/decline configuration (for wave solder offloading)
- Cooling Fan Banks
- Guides, pneumatic stops, and singulators
- High Temperature Conveyor Belt
- CE compliance

We welcome custom applications.

Additional Benefits

- Zero-gap edge guides eliminate the danger of boards becoming jammed under the edge guide.
- Precision-cut, proprietary aluminum extrusion frame.
- Extruded frame and conveyor rails allow accessories to be easily added and positioned.
- High-speed DC motors can move a five pound product at 66 ft./min. • Modular conveyor rails allow the length of the conveyor to be significantly increased or decreased at a minimal cost.

XXI. Model 8180 Mat Top Conveyor



Shown with optional equipment

Standard Features

- DC motor
- Emergency Stop and Reset Controls
- Interlocking, low-friction ESD mat top
- Zero-gap edge guide
- ESD-wrist strap receptacles

Application

The Model 8180 Mat Top Conveyor is a low-backpressure conveyor used to transport heavy products between manufacturing processes while supporting the product along its entire bottom surface. Mat top conveyors can be used as a simple means of spanning large distances or sophisticated controls, board actuators, and ergonomic workstation accessories can be added.

The low backpressure surface allows product to queue on a continuously running conveyor while minimizing friction on the product.

Typical applications include:

- Conveyance of pallets, final assemblies, boxes, or other smooth-bottomed products
- Buffering, accumulation, or singulation of products
- Acting as a platform for inspection, manual assembly, or cooling

Available Options

- PLC control (required for indexing functions or most operator controls/interfaces)
- Length (3–20 feet)
- 12- or 24-inch width
- Light Tower
- Fixed Stop at Discharge End
- Foot Rests, Armrests, and Workstation • Accessories
- Worktables
- Product Guides (side or center mounted)
- Cooling Fan Banks
- Pneumatic Stops and Singulators
- CE compliance

We welcome custom applications.

Additional Benefits

- Zero-gap edge guides eliminate the danger of product becoming jammed under the edge guide.
- Extruded frame and conveyor rails allow accessories to be easily added and positioned.
- High-speed DC motors can move a five pound product at 66 ft./min.
- Durable interlocking chain is great for heavy products and is very easy to remove and repair
- Optional guide work and pneumatic product stops can be positioned anywhere along the length of the conveyor
- Optional product singulators can segregate a single product from a continuous queue. • Modular conveyor rails allow the length of the conveyor to be significantly increased or decreased at a minimal cost.

XXII. Model 8200 Magazines

Standard Features



- Fifty-slot capacity
- Color-coded width adjustment with PCB measuring guide
- Numbered slots
- Replaceable sidewall inserts
- 10mm square tubular steel frame
- Four sizes available

Application

The 8200 series PCB magazines are designed to store printed circuit boards or other thin materials during manufacturing. Four sizes of magazines store products from 2" x 2" to 18" x 20". Each magazine has a maximum capacity of 50 at a pitch of 10mm.

The magazines are designed to run in all of Simplimatic's automated magazine handlers: Magazine Loaders, Magazine Unloaders, and Removable Magazine FIFO/LIFO.

Typical applications include:

- Using the magazines to help automate the manufacturing process by using them in conjunction with Magazine Loaders and Unloaders
- Using a magazine in an in-line buffer, which allows product to be removed during an intermediate step in the manufacturing process
- Manually loading the magazines and using them as WIP racks for processes such as good board/bad board sorting, cooling, or drying.

| Model | Width | Length | Height | Max Boards | Slot Pitch | Weight (lbs.) | Heat Tolerance | Max Width | Max Length |
|--------|-----------------|-----------------|-----------------|------------|------------|---------------|----------------|-----------------|-----------------|
| 8200-1 | 12.6 in (320mm) | 13.8 in (350mm) | 22.0 in (560mm) | 50 | 10 mm | 11.6 | 60°C | 9.7 in (247mm) | 13.7 in (350mm) |
| 8200-2 | 15.7 in (400mm) | 16.7 in (425mm) | 22.0 in (560mm) | 50 | 10 mm | 15.3 | 60°C | 12.8 in (327mm) | 16.7 in (425mm) |
| 8200-3 | 18.5 in (470mm) | 18.9 in (480mm) | 22.0 in (560mm) | 50 | 10 mm | 17 | 60°C | 15.6 in (397mm) | 18.8 in (480mm) |
| 8200-4 | 21.1 in (536mm) | 20.5 in (521mm) | 22.0 in (560mm) | 50 | 10 mm | 23 | 60°C | 18 in (458mm) | 20 in (508mm) |

C U S T O M E R S E R V I C E I S
O U R T O P P R I O R I T Y



Simplimatic Automation is a manufacturer of modular conveyors & automation for packaging and assembly production lines. The products we offer are used to automate production lines in the electronics, semiconductor, automotive, consumer products, food, pharmaceutical and personal care industries. Products are shipped, installed and serviced worldwide. See our web site for our worldwide list of authorized solution centers.



109 Ramsey Place • Lynchburg, VA 24501 U.S.A.
Phone: 434-385-9181 • Fax: 434-385-7813
www.simplimaticautomation.com

Email: sales@simplimaticautomation.com