



CONVEYOR CATALOG

S&P

SYSTEMS &
PROCESS







SENTRY EQUIPMENT HAS PROUDLY SET THE INDUSTRY STANDARD FOR CONVEYOR SYSTEMS FOR OVER FOUR DECADES.

With a solid reputation for crafting durable conveyor solutions right here in the United States, Sentry stands as a symbol of reliability. Whether it's accumulation tables or air conveyors, our loyal customers turn to Sentry for top-notch products, ensuring smooth and worry-free operation of their conveyor lines. Each Sentry conveyor is meticulously engineered to meet your unique specifications because we understand that your business is anything but one-size-fits-all.



We take pride in using only the finest components and materials in crafting Sentry Conveyor, all rigorously tested in our own facilities to ensure unparalleled quality.

OUR PRODUCT OFFERING LINEUP

- Accumulation Tables
- Activated Roller Belts
- Case Conveyor
- Can Style Air Conveyor
- Neck Guided Air Conveyor
- Table Top Conveyor
- Pack Conveyor
- Pallet Stacker
- Shell Denester
- Dry Trash Removal
- Lowerator Rinser
- Racetrack Rinser
- Headspace Sterilizer
- Elevator / Lowerator

ACCUMULATION TABLES



Buffering to Improve Line Efficiencies

For a beverage line to be productive, the filling, labeling and packaging equipment must be operational. Unexpected interruptions in the packaging area, container jams, and reel changes at the labeler can all be very costly. The Sentry Accumulator works as a buffer to accommodate those interruptions.

Accumulators offer gentle product handling and relief of back pressure by accepting overflow from the mass conveyors and reintroducing the stored containers back to the line at the appropriate rate as the downstream conditions allow.

In addition to adding a much needed grace period to the production process, bi-directional tables, uni-directional tables, and inline accumulators also allow for the "spin-out" of containers that remain in the filler when production stops so that un-capped containers do not go to waste waiting for the line to restart.



Uni-Directional & Bi-Directional

- 11 Gauge Construction
- 2.50" Square Bore Thermoplastic Conveyor Sprockets
- 2 Eurodrive Constant Speed Parallel Shaft End Mounted Drive Motors
- Dual #60 Roller Chain
- Formed 11 Gauge Supports
- 11 Gauge Formed Stainless Steel Backstop



Optimus

- A formed stainless steel and rectangular tubing frame supports an overhead trolley system
- The trolley system supports a dynamic powered guide rail
- The accumulator is equipped with a pre-mounted minimal local control enclosure

ACCUMULATION OPTIONS

- Inline
- Bi-Directional
- Recirculating
- Optimus

CONSTRUCTION OPTIONS

- Polished Stainless Steel
- Painted Carbon Steel

ACTIVATED ROLLER BELTS

Sentry is a Licensed OEM for the Activated Roller Belt Solution

This is a proven and innovative method of sorting, merging, rejecting, and even rotating packages with positive rail justification. Pneumatically actuated skid plates, located under the carry-way of the chain, form "activation zones". When energized, these zones influence, manipulate, and direct the flow of the product with ease and precision without compromising affordability.



ACTIVATED ROLLER BELT OPTIONS

- Case Turning
- Automated Singulation
- Sortation
- Switching Applications
- Perpetual Merge Solutions

CASE CONVEYOR



Proven Control Strategies

Years ago, when fillers were slower and packages were “one-size-fits-all”, case conveyor was simply a commodity. These days, with filler rates into the thousands of containers per minute and packages that are lighter weight and smaller than ever before, case conveyor has become a critical component to the packaging process.

The Sentry “built-to-perform, built-to-last” standard of construction is especially important in the world of case conveyor. Bulky, big bottle shells and large-count cases can be particularly hard on conveyor. Equally, wide-way leading products like 6x2x1 packages can be a nightmare if handled improperly.

Sentry combines decades of solid engineering practices with the finesse of proven control strategies to provide one of the more versatile case conveying solutions on the market.



Table Top Case Conveyor

- 11 Gauge Sideframe Construction
- Split Thermoplastic Sprockets
- Flange Mounted Sealed Bearings



Roller Style Case Conveyor

- 11 Gauge Sideframe Construction
- 16 Gauge Steel Roller Bearings
- Flange Mounted Sealed Take-up Drive & Idle Bearings



Motor Driven Roller Case Conveyor

- 11 Gauge Sideframe Construction
- Fixed Position Guide Rails
- 16 Gauge Galvanized Flo-Coat Rollers



CAN STYLE AIR CONVEYOR

Gentle Product Handling

Sentry Can Style Air Conveyor is the answer to conventional transportation conveyor when speed and gentle handling of sensitive containers are required.

The air cushion is designed to provide both lift and propulsion of the product without the back pressure that is usually generated on chain driven surfaces. Bright, annealed, stainless steel louvered decks, along with custom engineered stainless steel, hold down covers, come together to contain the product as well as regulate and direct the flow of the air.

Sentry Can Style Air Conveyor provides for reduced maintenance time, as well as lower overall cost of ownership over conventional chain-type conveyors.



FEATURES

- Bright, Annealed Stainless Steel Louvered Decks
- Custom Engineered Stainless Steel Hold Down Covers
- 11 Gauge Plenum Construction
- 18 Gauge Deck Construction
- 14 Gauge Top Hold Down Construction

OPTIONS

- Dust Cover
- Painted Mild Steel Plenums
- Stainless Steel Plenums

NECK GUIDED AIR CONVEYOR



High Speed Soft Handling of Plastic Bottles

High efficiency blowers pressurize the plenum and a custom sanitary louver design directs air flow toward the neck finish in the direction of travel to propel the product forward.

Bottles are guided with either stationary or multi-position pneumatically-actuated neck and body guides. Some bottles may require an additional stationary or pneumatically actuated shoulder guide to improve flow.

Plenum dividers are utilized to create multiple air flow control zones. These zones utilize pre-mounted sensors and custom programming to regulate back pressure and speed. Each zone contains a magnahelix gauge to visually monitor zone pressures.

Vertically adjustable hand-wheel actuated transitions are used to change between bottle sizes when interfacing with base-registered conveyors.



FEATURES

- 14 Gauge Single Plenum Neck Blow Construction
- 14 Gauge Stainless Steel Deck Construction
- 11 Gauge Stainless Steel Neck Guides
- Vertically Adjustable Hand-Wheel Actuated Transitions

OPTIONS

- Pneumatically Actuated Multi-Position Body Guides
- Pneumatically Actuated Multi-Position Neck Guides

TABLE TOP CONVEYOR

Custom Durable Multiple Conveyor Solutions

Sentry Table Top-style conveyors are ideal for the single-file transportation of glass bottles, aluminum cans, and a variety of plastic containers. This type of conveyor can be used for a multitude of applications ranging from high-speed filling to lower-speed pharmaceutical production.

Sentry's sturdy 11-gauge frame table top construction is available in both painted mild steel and polished stainless steel. All Sentry conveyors are custom engineered for each project. An extensive assortment of chain types and guide materials provide for optimal handling of the product.

Available options include drip pans, dust covers, and sanitary closed-top construction. We also have several guide-rail adjustment features to choose from with varying levels of automation and repeatability.



OPEN TOP



CLOSED TOP

FEATURES

- 11 Gauge Construction
- Self Tightening Clips for Individual Rail Adjustment
- Split Thermoplastic Sprockets
- Flange Mounted Sealed Bearings

OPTIONS

- Drip Pans
- Dust Covers
- Open-Top or Closed-Top Construction



PACK CONVEYOR

Maximize Your Efficiency

Pack conveyors are specifically designed for hard-to-handle packages. Sentry utilizes specialized handling techniques to ensure that the packages are properly presented to the packaging area.

Multi-packs such as film bundles, decorated cartons, and banded six-packs that are marketed towards the individual rather than a family or group, are by their very nature compact. Therefore, transportation to the merchant can be a challenge.

In order to complete the finished goods and create a more stable load for the palletizing process, Sentry assembles the secondary units into larger host cases such as trays, boxes, or shells. While handling techniques such as the use of close coupled transfers, dynamic guide

rails, and low-back pressure chains are all vital to the success of pack-style conveyors, Sentry design experience and control philosophies are what make all of the difference.



CASE STYLE



TABLE TOP STYLE

FEATURES

- 11 Gauge Construction
- Adjustable Guide Splitter Rails with Laser Etched Scales and Ratchet Handles
- Flange Mounted Sealed Bearings

OPTIONS

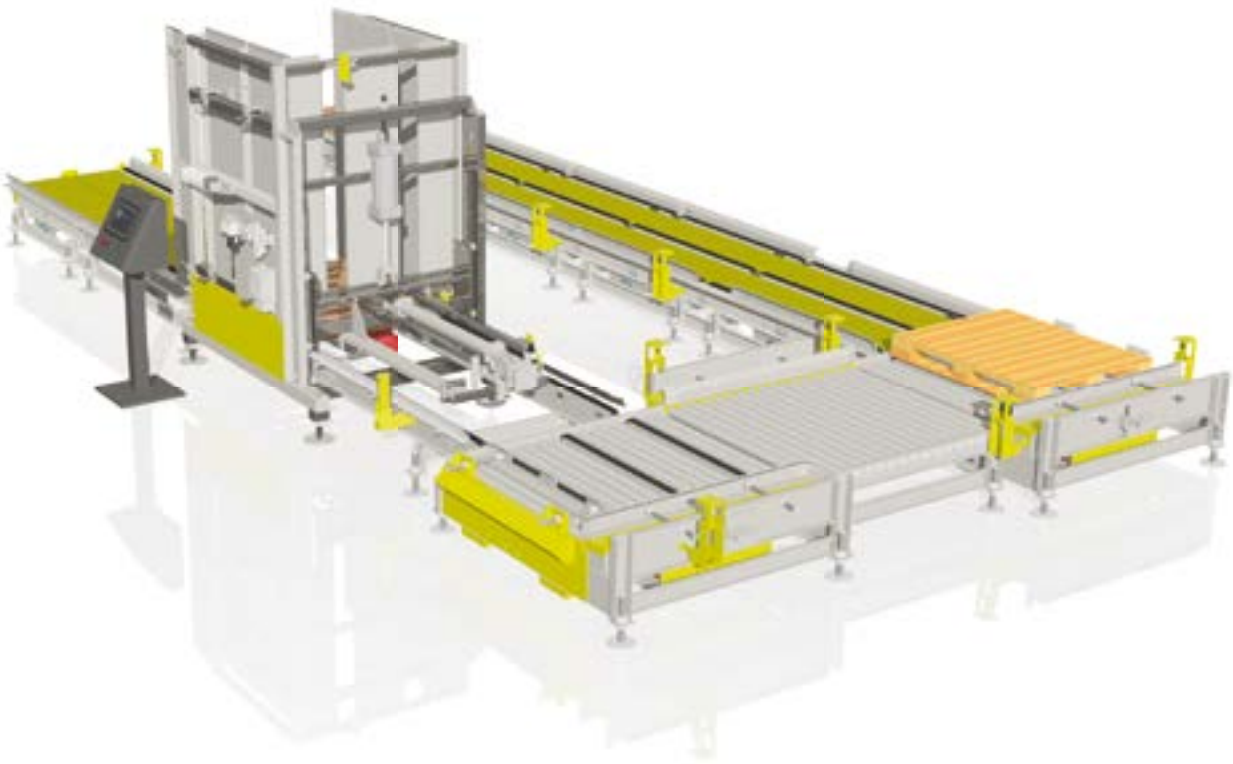
- Polished Stainless Steel
- Painted Carbon Steel Construction

PALLET STACKER

Performance, Strength, and Durability: Sentry Pallet Conveyor Stands Alone

Sentry's Self-Contained Automatic Empty Pallet Stacker is designed to reduce workforce injury by automating your pallet stacking process.

Empty pallets convey into the Pallet Stacker one at a time. The Stacker Lift raises a pallet into position, and the Stacker's Forks extend into the pallet to hold it in place. Once the next pallet is in position, the Stacker's Forks are retracted allowing the pallet(s) to rest on top of the new pallet. This process repeats until the Stacker reaches its capacity. The stack of pallets are then released to a discharge conveyor or picked up directly from the Stacker by a fork truck.



FEATURES

- Heavy Duty Formed Sheet Metal Frame Construction
- Dual Air Cylinder Arrangement
- Prewired NEMA 12 rated Control Console with Pushbuttons for Manual Operation
- Stacker Capacity - Approximately 10 Pallets
- Capable of Handling both Wood and Plastic pallets

BENEFITS

- User-Friendly Controls
- Minimizes Labor Costs
- Reduces Workforce Injury

SHELL DENESTER



Reliable Automated Shell Handling

The Sentry Shell Denester is designed to receive and separate columns of stacked plastic returnable soft drink trays onto the shell washer or packer delivery conveyor.

The Main Control Console (MCC) is located on the operator platform and includes an Allen-Bradley PanelView Plus color touchscreen which provides both manual controls and machine diagnostics information.

Pallet loads of plastic shells are loaded onto the system and the pallets will automatically sequence onto the pallet lift / unload conveyor. The system's operator will remove stacks of shells from the pallet and place them onto the Denester Infeed Conveyor. A static slide plate is provided to aid in this transfer. The Denester Infeed Conveyor conveys the stacks of shells to the Denesting Unit. Pneumatically-operated pusher indexes the stack of shells into the denesting chamber.

The Denesting Unit is equipped with a compression stop and electrically-driven metering belts to separate and feed the shells onto the discharge conveyor.



FEATURES

- Full Pallet Conveyor
- Automatic Empty Pallet Stacker
- Allen-Bradley PanelView Plus color touchscreen
- Static Slide Plate
- Metering Chute
- Pre-Wired Control Panel with CompactLogix Programmable Controller

OPTIONS

- Operator Platform
- Stainless Steel Upgrade
- Conveyor Variable Frequency Drives Shell Auto-Adjust
- Pallet Stacker Auto-Adjust

DRY TRASH REMOVAL

Durable Plastic Shell Dry Trash Removal

The Sentry Dry Trash Removal Conveyor is designed to eject loose debris from plastic beverage crates. The friction top Case Conveyor with half-round guides rotate each crate 90° upright. An 11.5 HP regenerative blower removes loose debris from the crates. Debris is ejected through the stainless steel debris chute into the trash dump bin.



FEATURES

- Stainless Steel Construction
- NEMA 4X Push Button Station
- 2 Pre-Wired Motor Disconnects
- 2 Pre-Wired Photo-Eyes
- 11.5 HP Regenerative Blower Assembly
- 14 Gauge Type 304 Stainless Steel Debris Chute
- 2 HP Drive Motor and Transfer Roller
- Trash Dump Bin

LOWERATOR RINSER



User Friendly, Quality Assured, and Always Tough

Sentry carries a complete line of side grip style empty container rinsers. The high level “lowerator” style rinsers are the perfect solution for the more conventional down-stacker style depalletizers by combining the rinsing process with that of an elevation change to floor level.

A Quick adjust handwheel assembly allows the distance between grippers to be manually set for the required product diameters or widths. Machine includes a digital positioning indicator.

The rinse manifold assembly is mounted in a 14 gauge stainless steel enclosure with a removable top cover and is pre-piped to a filter/regulator/coalescer unit with an air pressure gauge, filtration unit and solenoid valve. A high-pressure vacuum blower with washdown duty motor is supplied for debris removal from the rinse manifold enclosure—with discharge deflector sleeve. Drain pans with pipe half-couplings are mounted under the rinse and drain sections of the gripper conveyor.



FEATURES

- Multi-Stage Air Filtration System
- Low Pressure Monitoring Sensors
- Vacuum Extraction System for Debris Removal
- Stainless Steel Construction
- Pre-wire of all Electrical Devices
- Vertical Manifold Adjustment
- Operator Friendly Lateral Adjustment for multiple product Sizes

OPTIONS

- 11 gauge, Handwheel Adjustable Rinser Infeed Conveyor
- Category 3 Safety Upgrades

RACETRACK RINSER



Rinsing at The Same Level of Elevation for Restricted Spaces

Sentry carries a complete line of side grip style empty container rinsers. The low level "race-track" style rinser is ideal for floor level depalletizer systems due to the fact that it keeps the flow of the product at the same elevation.

A Quick adjust handwheel assembly allows the distance between grippers to be manually set for the required product diameters or widths. Rinser includes a digital positioning indicator.

The rinse manifold assembly is mounted in a 14 gauge stainless steel enclosure with a removable top cover and is pre-piped to a filter/regulator/coalescer unit with an air pressure gauge, filtration unit and solenoid valve. A high-pressure vacuum blower with washdown duty motor is supplied for debris removal from the rinse manifold enclosure—with discharge deflector sleeve. Drain pans with pipe half-couplings are mounted under the rinse and drain sections of the gripper conveyor.



FEATURES

- Automatic Gripper Chain Take-Up Units with Pneumatic Cylinders
- Stainless Steel Construction
- Pre-Wire of all Electrical Devices
- Vertical Manifold Adjustment
- Operator Friendly Lateral Adjustment for Multiple Product Sizes

OPTIONS

- Water Rinse Manifold or choice of Multiple De-Ionized Air Rinse Options
- Category 3 Safety Upgrades

HEADSPACE STERILIZER



Vertical and Horizontal High Speed Cap Sterilization

The Sentry "Headspace" or Cap Sterilizer is designed to serve between the capper and cooler on hot fill lines. Products that need to be filled hot, such as tea, juice or sports drinks usually have a very limited period of time before they need to reach the cooling tunnel. In transit to the cooler it is necessary to tilt or invert the product for a given period of time to allow the super-heated liquid to envelope the inside of the closure.



Laydown Style

- Stainless Steel Construction
- Automatic Gripper Chain Take-up Units with Pneumatic Cylinders
- Spray System inside the gripper conveyor frames, consisting of stainless steel pipe, fittings and solenoid valve assist in removing product spills from the gripper chain and wearstrips
- NEMA 4X Junction Box
- 3 Motor Disconnects
- 3 Photo-Eyes
- 2 Chain Take-up Proximity Switches
- 1 - QD Cable for Air Pressure Switch
- 1 - Fault Beacon
- 1 - QD Cable for Rinse Solenoid



Sidegrip Style

- 11 Gauge Stainless Steel Constructed Support Frame and Cross Members
- Automatic Gripper Chain Take-up Units with Pneumatic Cylinders
- Quick Adjust Handwheel Assembly
- Dodge Stainless Steel Sealed Bearings with Stainless Steel Grease Fittings
- Spray System inside the gripper conveyor frames, consisting of stainless steel pipe, fittings and solenoid valve assist in removing product spills from the gripper chain and wearstrips
- Option of Friction Style Curves or Wheel Style Curves *Speed Dependent

ELEVATOR / LOWERATOR



Ascend and Descend with Confidence

Sentry's Side Grip Elevators and Lowerators maintain continuous flow on the production line by providing vertical transportation for all types of containers.

Sentry Lowerators and Elevators include a Quick Adjust Handwheel Assembly. The adjustment assembly enables running different container diameter sizes on one machine. The conveyor is adjusted in or out by the hand wheel located on the side of the machine.

Support frame and cross members are constructed from 11 gauge stainless steel tubing. Conveyor frames are constructed from formed 7 gauge sheet metal.

Product carrying chains are (2) 3.75" roller base with snap-on urethane grippers. A programmable central lubrication system is included to maximize wearstrip and chain life.



FEATURES

- Heavy Duty 3" Square Tubing
- Programmable Central Lubrication System
- Quick Adjust Handwheel Assembly
- Pre-mounted Sensor to Monitor Chain Stretch
- Automatic Gripper Chain Take-up Units

OPTIONS

- Variety of Gripper Profiles
- High Temperature and/or Ozone Rated materials Stainless Steel or Painted Mild Steel Construction Extended Guarding
- Top Cover



Sentry is a premier manufacturer and integrator of conveyor equipment and related container handling machinery ranging from case handling to high-speed can and bottle lines. Equipped with an experienced team of engineers and project managers specializing in packaging line integration, Sentry fulfills a vast assortment of handling applications across many consumer markets. Their system engineering capabilities assures uncompromised quality and support throughout a project—from concept to completion. As part of the ProMach Systems and Process business line, Sentry helps customers protect and grow the reputation and trust of their customers. ProMach is performance, and the proof is in every successful project.

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