



SPIRAL MERGE DIVERT CONVEYOR

The CarterRoll™ Spiral Merge/Divert Conveyor is a safe, durable, reliable and sized in various standard widths and radiuses for any spiral configuration or mounting. These conveyors run only when needed to move product, which conserves power, reduces wear and tear, and limits operational noise. Our Spiral Merge/Divert Conveyors allow loads to enter and exit any spiral from several different elevations. In addition, the modular design of our Spiral Merge/Divert Conveyor allows us to easily customize and modify the conveyor to accommodate your changing needs.

Each CarterRoll™ Spiral Merge/ Divert CarterRoll™ Conveyor consists of motorized power rollers (MPR) and slave / idler rollers configured into zones — with the master power roller and idler rollers interconnected via “O” rings. Motorized power rollers are placed as needed along the conveyor to ensure consistent movement and control of the product. The number of power rollers can be adjusted to accommodate various product sizes and weights. Our zone design also provides zero-pressure, zero-contact accumulation capabilities and a “run-on-demand” feature.

With run-on-demand, each zone stops running when no product occupies the corresponding zone, which helps reduce operating costs and extend product life.

Both mechanical and electrical components for the CarterRoll™ Spiral Merge/Divert Conveyor are modular and interchangeable. All electrical components meet applicable standards for rating, class and approvals for NEMA, UL and CE. All pre-engineered CarterRoll™ Conveyor equipment require a 24VDC system supplied power source.

BENEFITS

- Low power consumption
- Safe and quiet operation
- Innovative modular design
- Low noise ABEC Bearing Rollers
- Run-on-Demand feature and extended service life
- Reduced system footprint
- Enhanced system layout flexibility

CARTERROLL™

SPIRAL MERGE AND DIVERT CONVEYOR

Technical Data

Speed

- 30 FPM through 200 FPM
- DeviceNet™ compatible
- Power and control system cabling enclosed inside channels

Capacity

- 40 Lbs per linear foot

Applications:

- Option enables spirals to be used in vertical sortation such as palletizing
- Multi-level receipt and dispatch operation available

Mounting Capabilities

- Overhead or floor
- Clip-on design allows for mounting at any spiral zone

Product Detection

- Photo electric Sensor/Reflector configuration

Frame

- 12 GA steel, cross member supports, and available with or without protective covers (CarterRoll™ design)

Conveyor Drive

- 24VDC Powered Roller

Dimensions

- 36" - 56" Between frame
- 30" - 50" Conveyor surface

Mounting Capabilities

- Floor

Controls/Power Requirements

- 24VDC
- Controls available for any 24VDC.

Supporting Mechanisms

- Provision made for outside curve mounting and
- Overhead: Provisions for ceiling attachments

Conveyor Drive:

- 24VDC Powered roller

Zone Configuration

- Merges and Diverts are configurable at any 45 degrees of the spiral curve
- 2" to 3" Center to center
- Configurable to any spiral conveyor manufacturers' radius
- Optional paint colors available
- Sensors included to provide accurate merging and diverting
- Width and radius based on package and spiral size
- O-ring transmission from -32°F- 120°F

Standard Zone Contents

- Idler Rollers
- Coated Idler Rollers
- O-Ring
- Powered Roller

Features

- 40 Lbs per linear foot
- 24VDC operating voltage
- Modular component design
- Auto activated zero-pressure, zero-contact zones
- Reduced energy consumption
- Standard between frame widths range from 15" to 36"
- Plug and convey modules pretested and engineered to reduce maintenance
- Accumulation and train release modes
- Reduced noise levels



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