



Kliklok SmartScroll

High-Speed Screw Infeed Product Infeed And Reorientation

Kliklok's SmartScroll provides product infeed timing and product turning for high-speed endload cartoning lines. The screws work with products that have enough rigidity and integrity to withstand accumulation in the upstream conveyors, such as frozen meal trays and bowls.

The SmartScroll accepts randomly delivered and accumulated products on a 10-foot conveyor with photosensors that control the screws' speed. Products are placed on-pitch (synced with the cartoner's PIC) – or turned and placed on-pitch – then placed into the open flights of the cartoner's PIC.

Positive tray placement

The rotary screw device offers positive high-speed tray/bowl placement. The unique 1:1 indexing transfer ensures accurate placement and the highest overall efficiency compared to other transfer systems.

Easy operation from cartoner's HMI

Control systems on the endload cartoner sync with the SmartScroll and adjust speed to match the flow of incoming product.

High-speed short-distance product turning

The SmartScroll can also turn products at high speed in the smallest footprint possible. The integral turning capability allows trays to be presented narrow-edge-leading, which simplifies conveyor design and plant layout.

1:1 speed ratio

The SmartScroll perfectly matches the endload cartoner's speed, allowing the cartoner to run at design speeds rather than the typical "10% faster" needed to accommodate sweep transfer and flighted transfer systems.

Simple, fast changeovers

Quick-release levers allow easy replacement of the scrolls. Scrolls fit only one way for "operator level" changeovers. An optional parts cart is available for storage of all changeover parts.

Key Features

- ▶ Speeds up to 325 products/min
- ▶ Timing and turning screws
- ▶ Stainless steel washdown design (IP65)

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Technical Specifications

Performance		Tray Size Range	Minimum	Maximum
Production Speed	Variable to 325 products/min	Length	127 mm (5.00")	279 mm (11.00")
Actual speed depends on product characteristics, consistent accumulation of product, and cartoner capabilities.		Width	102 mm (4.00")	203 mm (8.00")
		Height	22 mm (.87")	102 mm (4.00")
Operating Requirements		Bowl Size Range	Minimum	Maximum
Power Consumption	13.8 kVA	Diameter	127 mm (5.00")	279 mm (11.00")
Air	28 liters/min (1 cfm)	Height	22 mm (.87")	102 mm (4.00")
	5.5 bar (80 psi)			
Construction		An individual product combining multiple minimum or maximum dimensions may not be compatible with the standard system.		
Tubular stainless steel frame. Stainless steel shafts. Nickel-plated chains, pulleys and sprockets. Clear polycarbonate guards.				
Shipping Weight	680 kg (1500 lb)			

Standard Features

- ▶ Heavy-duty, fully-welded tubular stainless steel washdown frame (IP65 standards)
- ▶ Servo-driven timing or turning screws
- ▶ Tabletop chain-style infeed conveyor with safety tunnel
- ▶ Quick-release levers for screw changeover
- ▶ Overhead jam detect mechanism
- ▶ Corrosion-resistant nickel-plated chains
- ▶ Sealed-for-life bearings
- ▶ Insight® color touch screen icon-based operator interface
- ▶ Allen-Bradley PLCs
- ▶ Sanitary washdown wiring

Optional Features

- ▶ Alternate elevations
- ▶ Special configuration infeed conveyors
- ▶ IP66 MPF food grade Rockwell servos
- ▶ Caustic washdown
- ▶ Laser-cut “mesh” guarding
- ▶ Changeover parts cart for screws and endload cartoner change parts

