

# Tobacco Sorter 3 System 720

The [Tobacco Sorter 3](#) removes foreign materials from strip tobacco at unprecedented rates and accuracy - helping achieve the highest standards for purity, maximum yields, reduced overhead, and limited product liability. The System 720, our highest capacity model, sorts up to 9,000 kilograms an hour. Improve your competitive edge with Tobacco Sorter 3!



## The Industry's Newest, Most Advanced Inspection Technology

- New cameras, image processing, and ejector controller modules use CameraLink™ and Firewire® connectivity, offering the best performance and upgrade path in the industry, with simplified wiring for easy module replacement
- Advanced image processing modules enable superior sorting for size, shape, gauging, and small defect detection
- Powerful graphical user interface simplifies operation and allows easy remote operation
- Linux-based, full color SVGA display
- Built in self-awareness with system-level diagnostics
- State-of-the-art technology assures the best long-term return on investment by enabling future enhancements, changes, addition of new sensing technologies, and simplified maintenance

## Benefits

- High speed, high volume inspection - up to 9,000 kg/hr
- Gentle handling - stabilizes product with no degradation
- Extraordinary detection: over 2 million colors
- Subtle color discrimination over wide range
- Detects metals, plastics, paper, black rubber, cellophane, string, foreign organic material, etc.
- Consistent performance - the industry's best non-tobacco rejection and good-product retention
- Global, around-the-clock support and service

## Options

- Infeed distribution device
- Product dividers for recirculation
- Pneumatic transfer outfeed chutes
- Site-specific engineering



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## Features

- Laminar airflow on-belt product handling system
- Precise, high-speed rejection valves
- Sealed, stabilized optics/electronics enclosures for optimum operating environment
- Real-time video processing and valve firing
- Self-diagnostics capabilities
- Open, easy-access design
- Lamp life of 10,000 hours

## Key Technology

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## Specifications

- Conveyor speed: 5 m/sec
- Capacity: 9,000 kg/hr
- Belt width: 1,830 mm
- Sorter size: 4,700 mm L x 2,600 mm W x 2,300 mm H
- Controller size: 940 mm L x 3760 mm W x 1,880 mm H
- Net sorter weight: 3,856 kg
- Net controller weight: 275 kg (600 lbs.)

## Utility Information

### Electrical

Unfiltered single phase power to the SOLA and three phase power and motor starters to the motors that meet the following specifications:

- Controller power requirements: 175-520 VAC, 50/60 Hz, single phase, 5kVA
- Standard cable length between Controller and Sorter is 15m; customer to provide minimum 63.5 mm wireway
- Motor power requirements: 200-575 VAC, 50/60 Hz, three phase
- Air assist blower motor power: 2.25 kW
- Conveyor drive motor power: 3.75 kW

### Air

Instrument quality compressed air is used to remove the foreign material from the tobacco and must meet the following specifications:

- Air quality shall meet ANSI/ISA-S7.3-1975 (formerly ANSI MC 11.1-1976) standards
- 6 bars minimum
- Average air consumption 127 m<sup>3</sup>/hr; maximum 170 m<sup>3</sup>/hr
- 1 inch NPTF connection on Vision Module

### Water

Cooling water is required for maintaining proper temperature of electronics in the enclosures, and must meet the following specifications:

- 3 bars minimum, 5 bars maximum
- Maximum flow .6 m<sup>3</sup>/hr at 3 bars
- Filtered to 40 microns, potable, with a pH of 6.9-7.1
- Inlet temperature of 10-21°C when ambient does not exceed 38°C
- 1/2 inch NPTF connections on Vision Module, 3/8 inch NPTF connections on Controller
- Required heat removal is 7.7 kW @ 27°C ambient, 11.4 kW @ 43°C ambient with 15.5°C inlet water temperature

### Vibration

The mounting structure supporting the Sorter must not transmit vibration into the system exceeding the following specifications:

- 0-20 Hz = 2.54 mm/sec
- 21-60 Hz = 1.27 mm/sec
- 61-1,000 Hz = .254 mm/sec

### Dust Collection

Product stabilization air must be removed from the Air Hood to prevent turbulence and product loss. Consult Key for design assistance.

- 3,060 m<sup>3</sup>/hr through 305mm diameter collection duct

