

# Tobacco Sorter 3 System 480

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 480, our medium-capacity model, sorts up to 6,000 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 6,000 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



(Model 240 Shown)

**tobacco  
sorter.3**

## Features

- Laminar airflow on-belt product handling system
- Top and bottom viewing cameras with projection-lighting vision module
- Sealed, stabilized optics/electronics enclosures for optimum operating environment
- Precise, high-speed rejection valves
- 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: 6,000 kg/hr
- Belt width: 1,220 mm
- Sorter size: 4,670 mm L x 2,310 mm W x 1,980 mm H
- Controller size: 940 mm L x 760 mm W x 1,880 mm H
- Net sorter weight: 2,722 kg
- Net controller weight: 275 kg

## 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 63.5mm 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-S73-1975 (formerly ANSI MC 11.1-1976) standards
- 6 bars minimum
- Average air consumption 85 m<sup>3</sup>/hr; maximum 127 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 5.5 kW @ 27°C ambient, 29,250 Btu/hr (8.5 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.

- 2,039 m<sup>3</sup>/hr through 305mm diameter collection duct

