

# MODEL "HSS" High Speed Sortation Conveyor



## LOOK AT THE FEATURES AND CAPABILITIES OF THIS CONVEYOR:

### FACTS ABOUT THE SORTER

There is virtually no limit to the length of the sorter. Units up to 500 feet long with as many as 30 diverters have been successfully built and installed. By using multiple "helper drives", the sort system becomes very flexible and can meet most user requirements. It can either sort "left" or "right" or it can be designed to sort both "left" and "right" (both sides). Recommended conveyor speeds are 200 FPM minimum to 300 FPM maximum. At 300 FPM, 16" long packages can be sorted at a rate of 80 per minute.

### MINIMAL PRODUCT LIMITATIONS

Package weights can range from a minimum of 3 pounds up to a maximum of 100 pounds. Package weight distribution (center of gravity) is more critical to a successful divert than the total weight of the product. Package sizes can be as short as 10" up to a maximum length of 72". Maximum product length is determined by the divert spur width and the divert spur radius. Minimum gap between products is 9", depending upon the response time of the sortation control system.

### ABOUT THE DIVERTER

The diverter is modular in design and can be installed at desired intervals as close as 3 feet centers minimum, up to

any desired spacing. It utilizes a 3" long driven urethane coated roller, that on demand, rises  $\frac{1}{4}$ " to  $\frac{3}{8}$ " and skews 30 degrees to divert the package. When in the down position, these rollers act as a bridge to stabilize small packages. Required air pressure is 40 PSI minimum, to 60 PSI maximum.

### BELT TAKE-UP

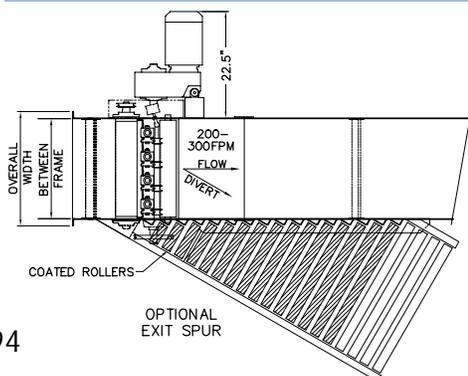
A mechanical (screw type) take-up is supplied when no more than two diverters are required. With three or more diverters, an air take-up is supplied to automatically maintain proper belt tension.

### INDUCTION SYSTEM

Although it's not necessarily a part of the sortation conveyor, the induction conveyor plays a key roll in the success of the diverting system. ACSI can supply the right equipment to ensure products are merged properly to traverse the sortation line.

### HORSEPOWER REQUIREMENTS

In determining horsepower, product live load and diverter horsepower requirements are the deciding factors. Each diverter requires  $\frac{1}{2}$  HP.



- Standard belt widths: 15", 21", 27", 33" and 39"
- Spur discharge conveyor with urethane covered rollers is slave driven by sorter
- Maximum motor: 5 HP for every 6 sorts
- Gentle sort based on dynamics of design
- Standard sort module is 48" OAL
- Alignment rollers at induction end
- All pulleys are machine crowned
- All rollers have precision bearings

