

# OmniMetalcraft corp.

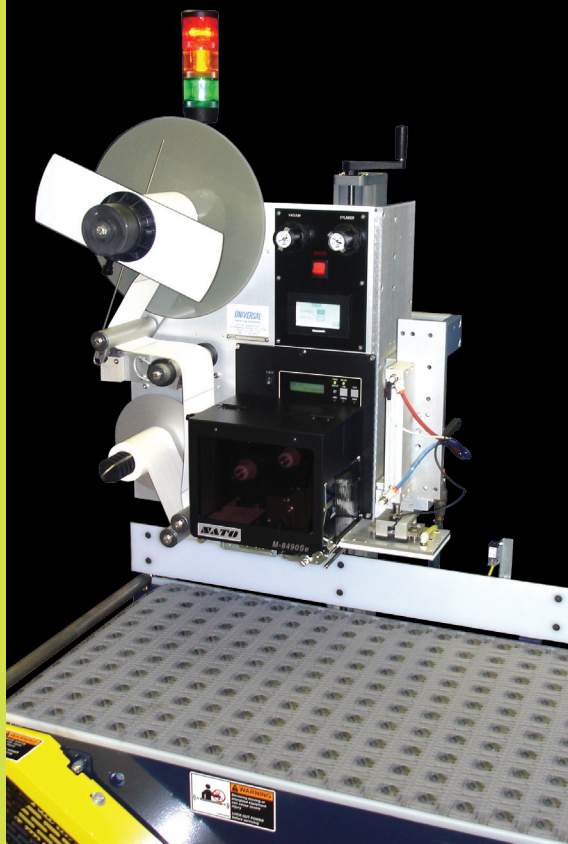
**ALIGNS PACKAGES IN A FRACTION OF THE SPACE**



## FEATURES

- Applications that require consistent justification of multi-sized packages in a small footprint.
- Orientates and aligns packages prior to label applicators, scanners, cameras, sorters, merges and other equipment.
- Orientates and aligns packages in a single file following descrambling or depalletizing.
- Aligns packages following merges or side transfers.

## PRINT & APPLY



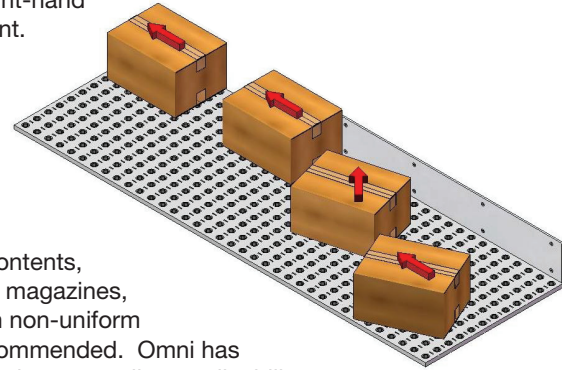
## VISION SYSTEMS



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## ACTIVATED ROLLER BELT ALIGNMENT STYLES & CONSIDERATIONS

Activated Roller Belt™ may contain rollers set at 30° or 45° angles and may be left-hand or right-hand angled. Aligners utilizing 45° activated rollers justify packages in a significantly smaller footprint. Higher speeds and higher angles increase side velocity. For this reason, 30° is recommended where footprint allows. See special considerations below. Aligners using 30° rollers move packages at approximately 12° to the direction of belt travel. A good rule of thumb to determine trajectory is 5 units of length for every 1 unit of side travel required.



### PACKAGE TYPES

Packages with rigid, uniform, flat bottoms are best. Examples of packages that work well are: corrugated boxes, lithograph packaging, tightly packed poly bags, poly bags containing flat contents, shrink-wrapped items with flat bottoms, large envelopes, CD/DVD cases, strapped bundles of magazines, books, tires, plastic trays and totes without large chines. Soft-sided packages, packages with non-uniform bottom surfaces that conform to the roller pattern, and loosely wrapped packages are not recommended. Omni has experience with a wide range of package types; contact customer service when there are questions regarding applicability or performance of a certain package type.

### PACKAGE SIZES

#### Width

- Minimum: 4"
- Maximum: practically unlimited

#### Length

- Minimum: 4"
- Maximum: practically unlimited

### PACKAGE ORIENTATION

Packages with length-to-width high aspect ratios (e.g., greater than 2:1) have a tendency to orient with length in the direction of flow due to friction against the side rail. If package orientation must be maintained a low friction bead rail may help to maintain orientation. Omni has experience with a wide range of package types, contact customer service for guidance on maintaining orientation with a particular package type.

### ALIGNER DIMENSIONS

#### Length

- 1.5x the run length required to move the smallest package from the farthest point to the justification rail
- Typical Length: 8'-10' (30°), 6' (45°)

#### Belt Width

- Minimum: 8"
- Maximum: practically unlimited
- Width increments: 2"

### ALIGNER SPEED/RATE

#### Belt Speed

- Maximum: 350 fpm

Note: Package speed will be up to 90% higher than belt speed over active rollers depending on the application

### OPERATING ENVIRONMENT

#### Temperature

- Minimum temperature: 32° F (0° C)
- Humidity: dry is preferred

Note: If the belt surface is wet, the angle of package trajectory may diminish. Lubricous fluids will have a larger affect. Some chemicals may react with or weaken Activated Roller Belt™. Contact Omni Metalcraft customer service for information.

### SPECIAL CONSIDERATIONS

#### Mitigating High Side Velocities

The side velocity of packages is a function of conveyor speed and angle. If the conveyor speed is extremely high, even 30° aligners will generate high side velocities, which may be undesirable. To mitigate this high side velocity, aligners may incorporate one or more of the following design features:

- One or more lanes of rollers near the justification rail can be disengaged by dropping out the carryway. Generally, this is done by testing in the field during start-up.
- A variable Activated Roller Belt™ or multiple parallel belts can be implemented. The angle of the rollers can be step-wise reduced as the package nears the justification side of the belt.