

A Guide to Parcel Sortation

Design considerations for developing an effective sortation system.

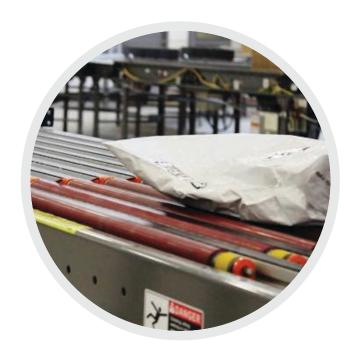




Package Profile

Boxes, polybags, flats...

The types of packages make a big impact in the correct technology. There are certain sorters which are best suited for boxes, while others work well for bags, padded mailers, flat envelopes, or loose garments. There is no "one size fits all" sorter.





Size & Weight

Long, heavy or light items...

Understanding the length and width of each package will determine how large each sort location or lane needs to be, and how well each item will transfer. Weight data is important to specify the correct technology, for both conveyability and weight limits.

















Sort Data

What info will we sort on?

Is the sortation data in the LPN barcode? If sorting by carrier, some customers choose to scan the shipping label after it has been applied. In other cases, sort data could be determined by dimensions, sorting by large/small or by package type.





Throughput

How fast do we go?

Throughput is often the data point customers focus on first. How many packages will need to be sorted in a given timeframe? Typically we measure daily or hourly package throughput. Certain devices operate faster than others, and in some cases it may make sense to develop discrete SLAM lanes to meet rate.

















Locations

How many sort locations?

The number of locations will typically be the data point used to determine how many individual sorters are necessary. For many technologies, one sorter can divert to two locations. There are some technologies that allow multiple locations on one belt.



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Destination

Gaylords, docks or trucks?

The type of destination will have an impact on how the system is designed. If sorting to gaylords or mail carts, it's important to understand the volume of the bin, the throughput, and how fragile your items are. Items could also be sorted into a variety of lanes leading to dock doors.







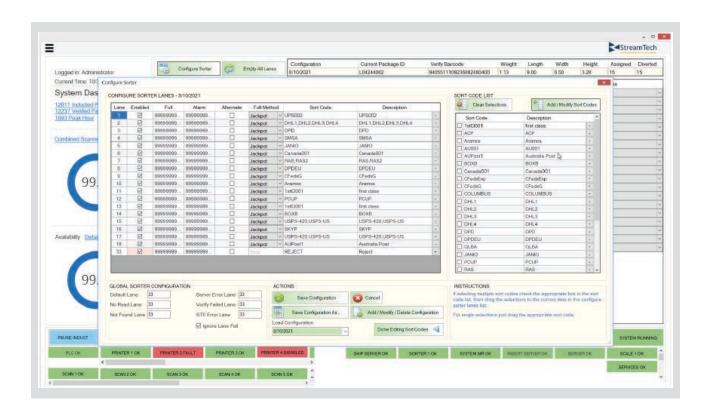








You'll Need Smart Software:



StreamTech WCS Software

In addition to monitoring exceptions, faults and verification in the WCS, StreamTech's Sortation module allows customers to define their own Sort Codes, and assign them to each lane, using a drag-and-drop configuration. This allows ultimate flexibility to change and re-define the lanes as needed.

Users can also define and save "recipes." If there are a few different sort lane configurations that are used often – maybe during different times of the year – they can save them and easily switch all lanes at once.

The Sortation software also monitors lane full conditions, allowing either overflow to another lane, or a pause of the sorter altogether.













...and Machine Controls:



Robust Controls Hardware

Machine control is provided by an Allen Bradley CompactLogix PLC, which is easily expandable to manage additional automation. Its open architecture means that end users are able to support themselves if desired.

- Add diverters, merges, etc.
- Open, standard PLC architecture
- All devices IP-addressable for instant world-class support
- Easily modified and expanded; can be extended to low cost system control of reseller conveyor equipment
- EWON remote support router included (eliminates need to go through VPN)















Let's discuss your sortation project.

www.streamtecheng.com





