

Conveyance: A Beginning & An End

Here's a lean, speed-of-flow strategy for distribution centers and warehouses.

If your company has growth aspirations, then a modern design of your distribution center and/or warehouses requires that you enable “speed-of-flow” to obtain increased order throughput velocity, and to accommodate a variety of SKU’s. Simultaneously, materials handling and storage equipment need to deliver a minimization of congestion, be able to expedite shipping, and bypass unnecessary pick processes – what I call “early exit.”

Let's start with some basics...

Why don't I observe more conveyors in wholesale-distribution warehouse facilities? In other words; the shortest line between “a beginning and an end.” Is it really because there is a preference to see a picker walk or transport material all the way to a staging area, from wherever the last pick was? Now, consider that a warehouse associate spends approximately 70 percent of his/her time walking. That actually means about 2.5 hours/day is spent performing “time-on-task” activities. Think about that!

Now, there's an opportunity to employ a lean, speed-of-flow strategy.

Where do conveyors come into play?

Conveyance systems can optimize speed-of-flow under a variety of circumstances and particularly if you are pursuing a growth in e-commerce (where you often experience more frequent, smaller orders). Don't struggle to keep up.

If you have done some high velocity “hits” analysis, then you probably have located (slotted) — or should locate — those “top sellers” into its own pick zone – a “high velocity pick zone.” Then, convey it!

If you have a variety of storage media (standard shelving, pallet racks, flow-racks, etc.) then you may be relying on — or should be relying on — different pick methods (batch, zone, wave, etc.) to accommodate piece picking, varying carton sizes, split cartons, and products with specific or unusual physical characteristics. Those varying types of product picks need to have an “outlet” to be consolidated with other products.

Divert it. Convey it!

Are you allowing for some orders to “early exit?” Particularly where discrete order processing is still the primary picking practice, why have a picker walk all the way through a warehouse and/or all the way to a staging area? Divert it. Convey it!

Appropriate conveyance increases the opportunity for packing and checking efficiencies by combining picked product into fewer shipping containers, i.e.; less cube.

Conveyance solutions

Today's flexible conveyance solutions can satisfy, by appropriate design scaling, every order fulfillment requirement, from polybags to more rigid totes, cartons of all sizes, and pallets. For larger companies, with greater volumes, conveyors can be combined with sortation equipment (another speed-of-flow concept) that can direct products/orders to an appropriate shipment preparation/or staging area.

Note: I've observed that even a “simple length” of conveyor through a strategic section of your warehouse



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can dramatically cut down on “walk time.” It's a significant, cost-effective solution.

Reimagine your warehouse design... go for it!

If you have growth aspirations, and a plan in motion, then modernizing warehouse design including conveyor utilization will, I guarantee, become more important to your organization's focus on future cost avoidance, competitive advantage and to your customer's satisfaction. 

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