



## Boost Picking Efficiency for Mixed SKU Pallet Building

Layer picking is ideal for high-volume staging and fulfillment. Selecting one or more full case layers at a time improves speed and accuracy for building mixed SKU rainbow pallets. Customers see immediate cost savings and up to 10x greater output by eliminating manual case picking and associated injuries, fatigue, and errors.

### Supercharge Layer Picking Productivity with Mallard Layer Pick Separator

While layer picking advantages alone are measurable, using pallet flow to feed inventory to the pick line delivers supercharged productivity and further improves warehouse safety. The critical component in this time and cost-saving pallet flow application is Mallard's proprietary Layer Pick Separator. The separator device isolates the front pallet from rear pallet forces to ensure clean and safe case picking and fast empty pallet removal.

#### Advantages

- Increased layer pick productivity
- Automatically replenished pick aisle
- Quick, safe pallet removal
- Reduced worker injuries & costs
- Less traffic and congestion in the pick zone
- Automatic release of rear pallets
- Minimum slope required
- Easily integrates with AGVs

### Pallet Flow in the Layer Pick Zone - How it Works

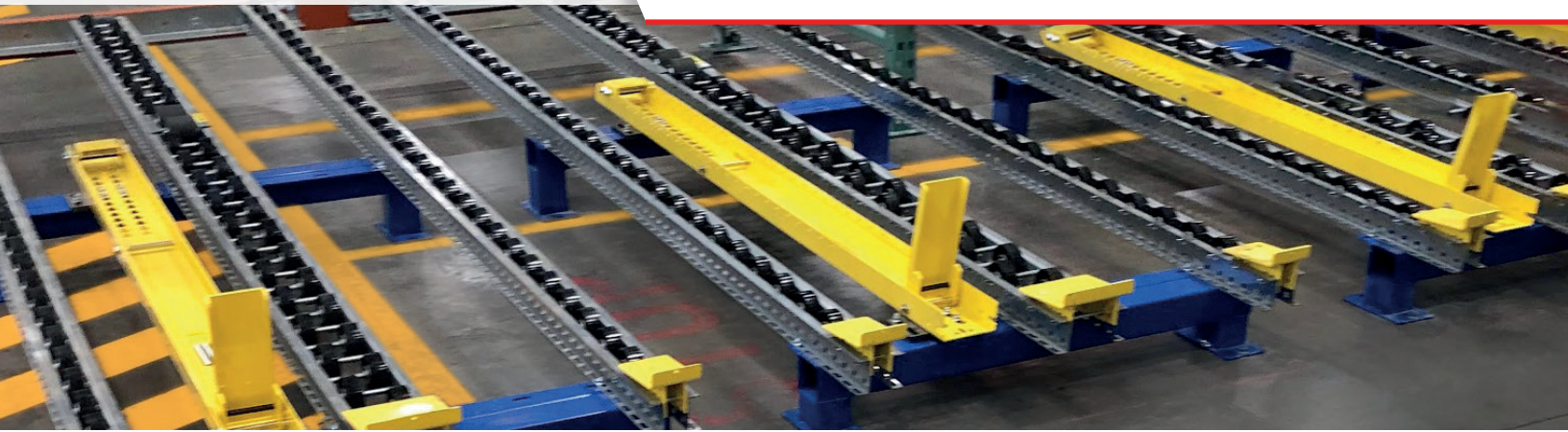
Floor-mounted pallet flow lanes are equipped with the layer pick separator and positioned on either side of the pick aisle. By isolating the front pallet, the layer pick device can cleanly and safely make the pick. When the pallet is empty, it is easily removed, and the rear pallets are automatically released to flow forward reducing forklift traffic and congestion in the pick zone.

To calculate back pressure in a pallet flow lane, multiply .06 times the combined rear pallet load weight. For example, in a 5-deep lane with 2,500 lb. pallets, the back pressure would be 600 lbs.

E.g. -  $.06 \times 2,500 \text{ lbs.} \times 4 \text{ pallets} = 600 \text{ lbs.}$





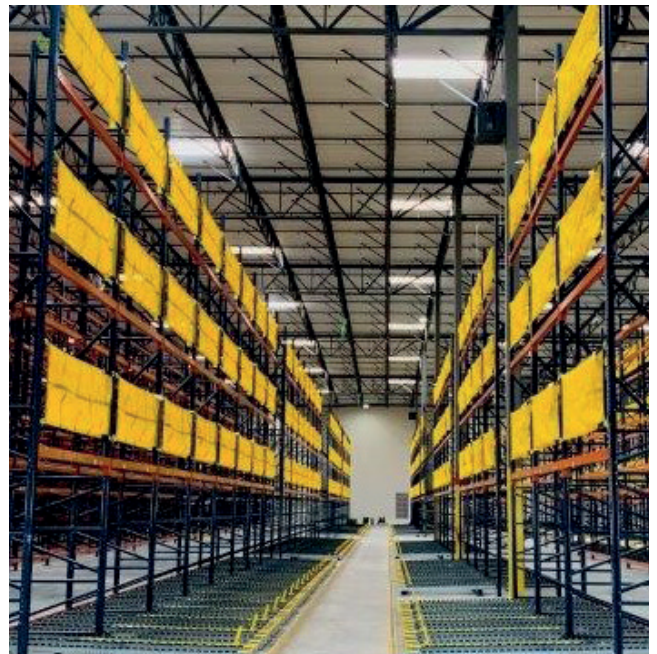


## Measurable Productivity Benefits

Layer picking using pallet flow makes sense for distribution facilities that ship case volume in layer quantities roughly 1,000+ layers per day. With high-velocity SKUs on both sides of the picker, the operator can pick orders 10 times faster than hand-picking cases at a rate of about 1200-1250 per hour vs. 240-250 by hand.

Additionally, high-volume picking can usher in a more flexible pick line allowing for SKUs in the pick zone to change by shift, or day depending on demand. With productivity increases and labor and equipment cost savings, ROI is quickly realized.

Visit our complete line of separators in our brochure for practical systems design and application advice. Also, our team of gravity flow rack specialists is always available to help.

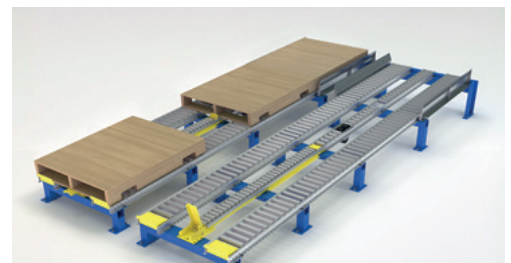


## Layer Pick Separator Lanes Design Considerations

- Floor-level pallet flow only
- Lane depth from 2-5 pallets deep (max. 4 pallets behind separator)
- All pallets must be the same depth (32" - 48")
- Add up to 24" clearance for layer picking attachment
- Installs beside center rail in 3-rail lane
- Mallard supports required in the last two positions for proper function
- Available for wheeled and roller pallet flow.



LP 400 for GMA standard pallets on wheeled pallet flow.



LP 401 for plastic & non-standard pallets on roller flow systems.