



Automated AS/RS Material Handling Equipment Handles Peak and Valley Labor

By Integrated Systems Design



The truth is: it's all about the design of your system! Sneaker power and adding bodies to catch up is usually a bandage applied to a larger problem. Often this is an indication of a lack of internal communication. You need to be in sync with what's happening with sales, marketing, business development and the executive staff. The warehouse executes what these other groups plan and implement, so knowing what's

expected and what is changing is important to define peak and valley activities and resource needs.

With that said, taking anticipated peak and valley performance multiplied by projected growth and a pinch of CMB (Cover My Butt), you get an idea of the performance levels that will be expected from your warehouse. If we're starting with a "green field", we evaluate and design a system accordingly. Most of the time however, we have an existing operation to run. As a result, we look for pain points and issue areas. We take the pain points and determine if the rate issues are due to process, procedures, layout or equipment. Then we select a solution concept and run its Return on Investment (ROI) calculation to verify the validity of the concept selected.

The Automated Flexi-Work Station - Creating high density goods-to-person, flexible order picking zones utilizing automation is often a great solution to address wide swings in throughput. Multiple types of automation (depending on SKU sizes and order velocity) including: **horizontal carousels**; **vertical lift modules (VLMs)**; **vertical carousels** and; pick-to-light flow rack can be designed into one workstation. **Integrated software** enables the manager to determine how many people should be picking from each piece of equipment. This can range from one

person per two horizontal carousels for high velocity periods down to one person for the entire system when there is very little activity.

The software for the workstation lights up the integrated **pick-to-light system** on each piece of equipment - guiding the operator where and how many to pick. A **batch order picking station**, adjacent to the work zone, is used to stage multiple order containers and direct the picker to place the correct amount of inventory in the appropriate containers as indicated by "put" lights. This high performance Flexi-Work Station system is just one example of how labor can be planned and scheduled to assure that the day's picks are accomplished while saving up to 2/3rds of manual picking labor and 65% of otherwise wasted floor space while increasing accuracy to 99.9%+ levels and extending order cut off times. For more information on the Flexi-Work Station and other sneaker-busting automated solutions, **please contact us.**