

# COLD STORAGE:

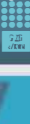
## Balancing Costs, Staying Competitive

The challenges of a cold storage warehouse are amplified version of those faced by dry goods facilities—and out of all of them, the most taxing is the extremely high costs of operating temperature-controlled storage. Because of these costs, manufacturers often look to third-party logistics (3PL) providers to decrease the burden. The two biggest places where 3PLs can save money? **ENERGY CONSUMPTION AND LABOR.**

### ENERGY ISSUES:

Utilities, mainly energy, are among the greatest operational expenses for a cold storage warehouse.

Cost of energy has increased 33% over the past decade and it will only get higher in the next decades to come



# 3X



Different products require different temperature zones—and this creates challenges for 3PL providers who may on-board and off-board clients throughout the course of the year with different storage requirements.

#### AVERAGE WAREHOUSE



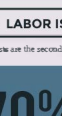
#### ENERGY CONSCIOUS WAREHOUSE



IDEALLY WANT TO OPERATE AT **40%** OF CURRENT CAPACITY

90,000,000 FT<sup>3</sup> TIER 2 PLANTILITY  
X \$0.11 AVERAGE PRICE OF ELECTRICITY \$0.07 AT 154 KWH/FT<sup>3</sup>  
**\$9,900,000**

90,000,000 FT<sup>3</sup> TIER 2 PLANTILITY  
X \$0.04 AVERAGE PRICE OF ELECTRICITY \$0.07 AT 0.60 KWH/FT<sup>3</sup>  
**\$3,600,000**

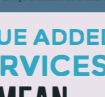


### LABOR ISSUES:

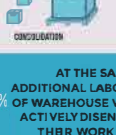
Next to energy, labor costs are the second-largest concern for a 3PL warehouse.



**70%** OF OVERALL COSTS GO TO LABOR



Automation is a way to save on these costs, but 3PL service providers have been reluctant to invest in it, because these systems are expensive and aren't always as flexible as human labor.



## VALUE ADDED SERVICES MEAN EVEN MORE LABOR

Value-added services such as repack operations, actual manufacturing, or consolidation give 3PLs a competitive advantage -- but are often unable to be provided because of high labor costs.

AT THE SAME TIME THAT ADDITIONAL LABOR IS NEEDED, 20% OF WAREHOUSE WORKERS ARE ACTIVELY DISENGAGED FROM THEIR WORK AND DO JUST ENOUGH TO GET BY



**\$38.00** PER AVERAGE HOURLY WAGE (INCLUDES CLERICAL, SUPERVISION, BENEFITS, FUEL ETC.)

**\$7.60** IS BEING THROWN AWAY PER HOUR DUE TO ACTIVE DISENGAGEMENT

x 8 HR/DAY  
x 5 DAYS/WEEK  
x 52 WEEKS  
x \$38.00  
**\$1,580,800 PER YR.**

INCREASING LABOR PRODUCTIVITY BY 10%

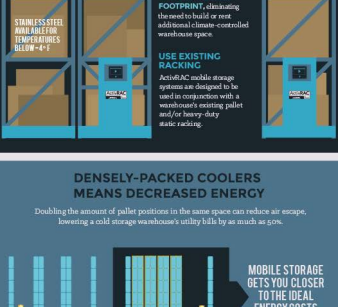
x 8 HR/DAY X 10%  
x 5 DAYS/WEEK  
x 52 WEEKS  
x \$38.00  
**\$1,422,720 PER YR.**

**\$158,050 SAVINGS PER YEAR**

### SOLUTION: Rethinking (and Compacting) Cold Storage

Compact mobile storage can create sizable cost savings for energy and labor operations, in addition to a host of additional benefits.

#### MOBILE CARRIAGE AND RAIL SYSTEMS MOVE SHELVING SIDE TO SIDE



#### DENSELY-PACKED COOLERS MEANS DECREASED ENERGY

Doubling the amount of pallet positions in the same space can reduce air escape, lowering a cold storage warehouse's utility bills by as much as 50%.



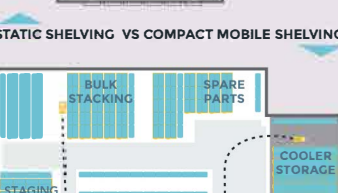
MOBILE STORAGE GETS YOU CLOSER TO THE IDEAL ENERGY COSTS

#### COMPACTING INVENTORY MEANS REDUCTION IN LABOR COSTS

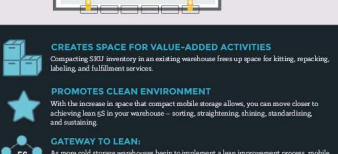
AN AVERAGE WAREHOUSE ORDER-PICKER WALKS ANYWHERE FROM **7-13 MILES** PER SHIFT

The fewer times a product is moved or touched, the fewer costs are associated with it—and the less time a worker has to travel to get to inventory—the more time that employee can spend on more profitable labor.

Providing warehouse employees with 100% accessibility and visibility to products in less space eliminates long travel times and unnecessary touches.



#### STATIC SHELVING VS COMPACT MOBILE SHELVING



- CREATES SPACE FOR VALUE-ADDED ACTIVITIES**  
Compacting SKU inventory in an existing warehouse frees up space for kitting, repacking, labeling, and fulfillment services.
- PROMOTES CLEAN ENVIRONMENT**  
With the increase in space that compact mobile storage allows, you can move closer to achieving lean 5S in your warehouse -- sorting, straightening, shining, standardizing, and sustaining.
- GATEWAY TO LEAN:**  
As more cold storage warehouses begin to implement a lean improvement process, mobile storage can help—particularly with process improvement and waste reduction elements.