

CAVEATS

OF SECOND-HAND EQUIPMENT PURCHASES

A dollar saved might be a dollar wasted.

Frequently, the success of an improvement project is measured by its return on the equipment investment. Project leaders are tempted to lower costs, while hoping to get the same level of benefit from the system modification. One tactic used to reduce the cost of a high-priced line item is to substitute new material handling equipment with used equipment. This used equipment might be items you already own or things purchased from a used-equipment dealer.

Whether you are expanding your current system or designing a system from scratch, there are limitations to employing used equipment. It can be a way to save money up front; however, it can actually cost you more in the long run. There are stipulations for using pre-owned equipment that you must heed to avoid buyer's remorse.

LOOKS CAN BE DECEIVING

Equipment that appears to be good may not, in reality, be satisfactory. An engineer with an equipment design background should evaluate the purchase before the check is signed. A challenge with used equipment is that it's hard to evaluate since, generally, you do not see it in operation. Equipment you already own and are using is less of a risk. You also have to be cautious of equipment you have in storage. It could have hidden defects, and that's why it was placed in storage.

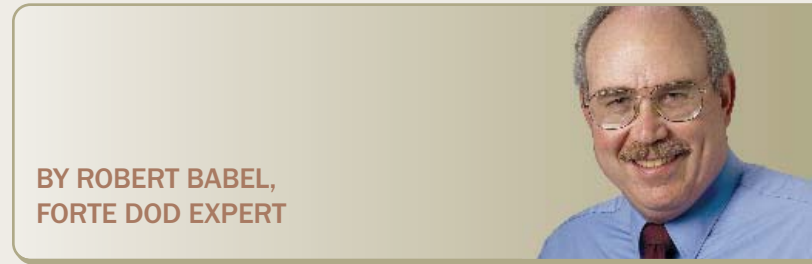
Most second-hand equipment comes without a warranty which means the seller has no accountability for the performance.

There are also many hidden costs in used equipment purchases of which you should be aware. Find out if the seller or buyer is responsible for the cost of dismantling, refurbishing, storing, packing, shipping and a myriad of necessary services associated with used equipment.

BUYER BEWARE

All too frequently, little information about the used equipment and its past can be verified. The seller often works with limited information about the previous user and important questions may have to go unanswered. The make and model of equipment, such as racks, pick modules and mezzanines, are hard to identify. Some manufacturers have product information stamped on the rack. If not, features like the capacity and seismic ratings are dangerous mysteries.

Ratings in manufacturers' catalogs may not be accurate years later. Regulations and standards are amended and equipment performance declines with time and use. What was considered safe five years ago may not be safe today. And because a rack has had its rating lowered doesn't render it safe. Many manufacturers are reluctant, or even refuse to install used rack. They don't want to be



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held accountable for the collapse of a rack and the possible damage it might incur.

Since it takes time and initiative to verify information regarding used equipment, work with a dealer. Start by submitting questions and ask for documentation regarding manufacturing facts. Then confirm the dealer's information with the manufacturer. Verify what the equipment is rated and determine if it meets the Rack Manufacturers Institute established standards. Used equipment dealers and online auctions depend on quick action by the purchaser. Most don't have an inventory. They make their money by moving things as quickly as possible.

OBJECTIVITY AND ACCOUNTABILITY

If you're planning a distribution improvement project, and are considering the inclusion of used equipment, have objective experts examine the equipment. A source separate from the buying and selling process can identify usable equipment from equipment that should be discarded. The right third party should be familiar with the variety of brands and models, and possess knowledge of spare parts availability, and the cost for the necessary refurbishment.

If you purchase used equipment, having a supervisor or project manager onsite can ensure the jobs of dismantling and loading are done right. Dismantling equipment requires meticulous attention and knowledge to be done right. Intimate knowledge of the new configuration into which the used equipment will be installed is also required. Hastily ripping material handling equipment out may render it useless. Tagging components according to the new engineered drawings will facilitate the installation process, providing easy identification and organization.

TIME IS MONEY

Another thing to keep in mind is that during installation of equipment, or dismantling and moving equipment, your system might be down. Downtime is costly so have a plan in place.

During the weeks of dismantling, sections of your automated system will be out of commission. Manual processes in areas such as order picking and pallet building will keep orders moving, however at added cost.



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Since there is virtually no time to test and debug the new system, another potential for trouble can be moving directly from one system to the next. Orders must still be shipped while testing and necessary modifications are in process.

WHEN IS OLD TOO OLD?

If equipment is more than five years old, it is most likely not worth reusing. In five years it will have experienced a fair amount of wear and tear, especially if was not optimally maintained. Spare parts might not be readily available for older models of equipment.

The cost to dismantle, refurbish, transport and install aged equipment might not be justifiable when estimating the expected life of a project. New equipment is made to order and will last longer. In most cases, material handling equipment more than five years old should be used only if a company is working within a tight budget or on a tight deadline. If the decision is made to install used equipment, a budget and plan to replace it during the next few years should be included in your evaluation.

CAN YOU MIX AND MATCH EQUIPMENT?

The heart of the system, including accumulation and sorters, needs to be reliable. New equipment is best placed in critical areas where sophistication is required. Placing used equipment in non-critical areas, such as carton flow rack, pick areas, gravity conveyors, and manned accumulation lanes, is less risky.

Resourceful engineers can transform used equipment not suited for critical areas into less-sophisticated roles. For example, old power conveyor can be made into gravity conveyor by removing the motorized components.

For every opportunity to employ pre-owned equipment, there are numerous costly risks. Budget-conscious companies set on incorporating used equipment into their systems can attain impressive returns on investment if they mind the caveats. Companies benefit by working with an objective resource that has proven design engineering and implementation expertise. This third party should work as an extension of the project team to ensure the best design to meet the objective of continuous process improvement.

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