

## **Conveyor System Implementation Considerations**

## ROI and Sustainability are the main event

Before implementing a material handling system, you have many considerations. The two biggest in today's economic conditions are: ROI and Sustainability.

If you are reading this, you probably already realize that when you make capital expenditures, you have to figure in your return on investment before the first signature is made on the purchase requisition. However, while this can be a complex and time-consuming project, it's not as daunting as you might imagine.

When ROI is calculated on the front-end of a project based upon improvements and reductions, the outward initial expenditure often is nothing.

Low hanging fruit in the process can be:

## **ROI Considerations**

- 1) Workforce reduction due to the implementation of the new equipment. This includes medical benefits, salary and any employee related expenditures.
- 2) Damaged, untracked, continually rejected, lost or misread product.
- 3) More product out quicker.
- 4) Quicker turnaround means less stock held.
- Reduction of other, now unused, production equipment.
  Sell or lease to recoup initial purchase of the new equipment.



6) More efficient equipment usually means more floor space to be used for additional production or storage for growth.

Any proactive company today realizes that sustainability isn't a buzzword but an asset when making capital expenditures. Not only is the equipment more efficient, it can make your production, process or facility much more sustainable and profitable.

For a more complex ROI explanation, see the following resources: WikiPedia or Order Fulfillment Systems.

## Sustainability Considerations – the money is in the details

- 1) Materials supplied are energy efficient. Most manufacturers have reliable data that shows energy and cost savings. You could save enough energy on a 1,000 foot run of conveyor in five years to pay for up to 90% of the initial cost of the equipment.
- 2) Highly efficient motors used in lieu of "standard". Again, less energy and usually less maintenance and oiling required which means more efficient, less heat generated, less wear and better energy consumption.
- All bearings to be sealed, high-speed premium. They run longer, generate less noise and usually do not require greasing. This will make your conveyor and equipment run quieter, more efficient and with less or no maintenance in the future.



- 4) Shutdown or limited run awareness. Make sure that the equipment purchased does not require energy to run at optimum speeds while product is not on it. Many cutting edge manufacturers, such as Hytrol Conveyor Company, Inc., have many options, accessories and models that utilize premium performance equipment with multiple sustainability features.
- 5) Utilize natural flow or gravity areas within your facility. Whether it's storage rack or conveyor, usually gravity feed or storage areas can be highly efficient and cost effective. These products do not use any energy, require very little maintenance and their overall cost is about half of what powered conveyor or typical storage and retrieval systems cost.
- 6) When you plan for a new system or process, figure out what to do with your waste. Whether it's dunnage, boxes, packing tape, paper tabs, etc... now is the time to provide a new plan of attack. Use a simple overhead or floor mounted takeaway belt conveyor to load the random waste. Have one or two locations for dumping or recycling of these items, this will reduce waste, potential accidents due to materials piling up, dumpsters located throughout the facility and the workforce needed to continually monitor it.

For more information, visit <u>www.cisco-eagle.com</u>.