

ON DEMAND PACKAGING FOR DISTRIBUTION

Sponsored by:



Presented by:

Tom Coyne



2013 MHI™ Copyright claimed as to audiovisual works of seminar sessions and sound recordings of seminar sessions. All rights reserved.



What is On Demand Packaging?

Eliminate Pre-Made Boxes, and....



Make your Own Boxes out of raw material corrugate



Sounds simple – but there are huge benefits !

The Corrugated Market Until Now

Box Manufacturer



Packing Supplies Company



Wholesale
Supplier



Your Distribution Center



Why the Current Corrugated Supply Chain is Sub-Optimal

- ▀ Pre made boxes are never the right size
- ▀ Box inventory is expensive
- ▀ Managing box inventory takes time
- ▀ Void fill is not sustainable
- ▀ Box erecting takes time in packing

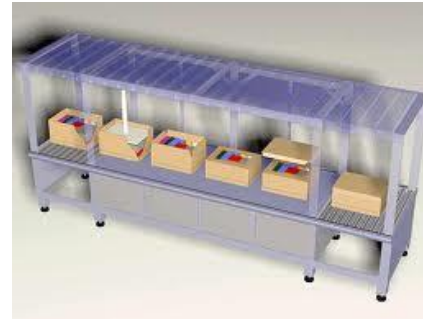
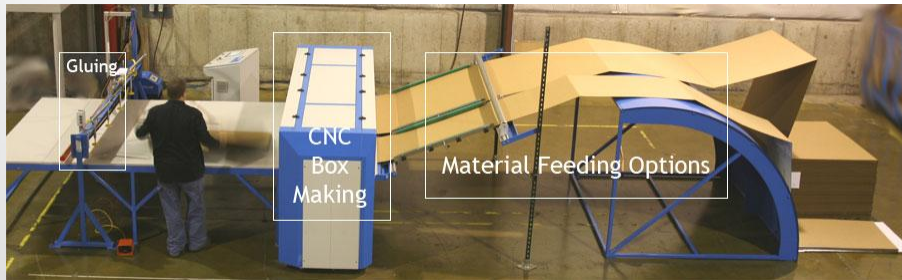
There are now multiple solutions – some with revolutionary additional benefits!

Today's On-Demand Packaging

Person Operated Machines



Fully Automated Systems

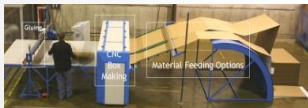


Today's On-Demand Packaging

Person Operated Machines



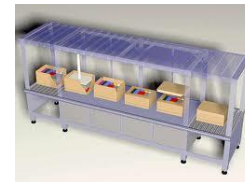
- CNC style machine cuts pieces to exact size
- Person assembles box and packs items
- Manual input or host interfaced
- End result is a fan-fold box
- Few changes to pick-pack-ship process
- Point of Interest: Machines can be free of cost when obtained by corrugate supplier



Fully Automated Systems



- Fully automated machine makes right sized box, OR reduces size of pre-made box



- Box is then sent to picking areas
- Simpler packing – fewer steps.



- Very High quality box. Not fan-fold, but improved construction

Material Costs

- Boxes
- Void Fill
- Labeling

Box Inventory

- Inventory Cost
- Inventory Handling
- Obsolescence of material

**What are
the
Benefits?**

Order Fulfillment

- More efficient picking
- Less packing activities

Shipping

- Less cube
- Higher quality shipper

Benefits

	Manually Operated	Fixed/Automated	Flexible/Automated
Box Inventory	Eliminated	Reduced	Eliminated
Void Fill Reduction	Mostly Eliminated	Reduced	Mostly Eliminated
Freight Reduction	30%-40% less cube	25% - 30% less cube	30%-40% less cube
Packing Labor	Box labor increased	30% to 50% reduction	30% to 50% reduction
Material Handling	Standard	Reduced	Reduced
Wastage	~ 5%	Die Boards	< 1%
Box Type	Slotted Container	Die Board with lid	Proprietary with reinforced corners

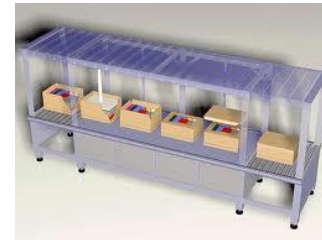
Cost / Benefit Ratio

■ Cost ■ Benefit

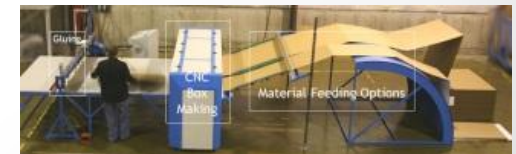
Flexible/ Automated



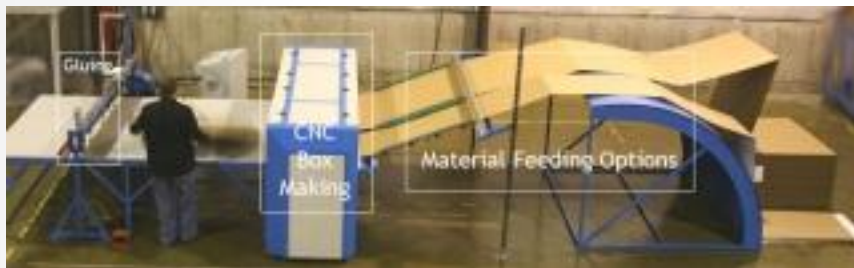
Fixed/Automated



Manually Operated



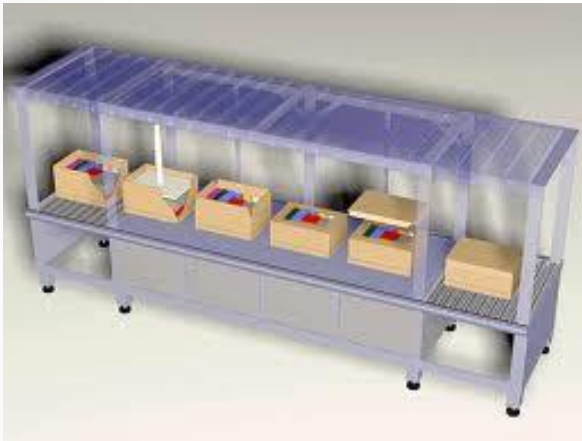
Let's Examine the Benefits Manually Operated Machines



- Reduced cubic volume shipped
- Reduction in packing materials



Let's Examine the Benefits Fixed Automation



- Reduced cubic volume shipped
- Reduction in packing materials
- **Reduction in packing labor (pick to shipper)**
- **Automated manifesting**
- **Automated carton closing**

Let's Examine the Benefits Flexible Automation

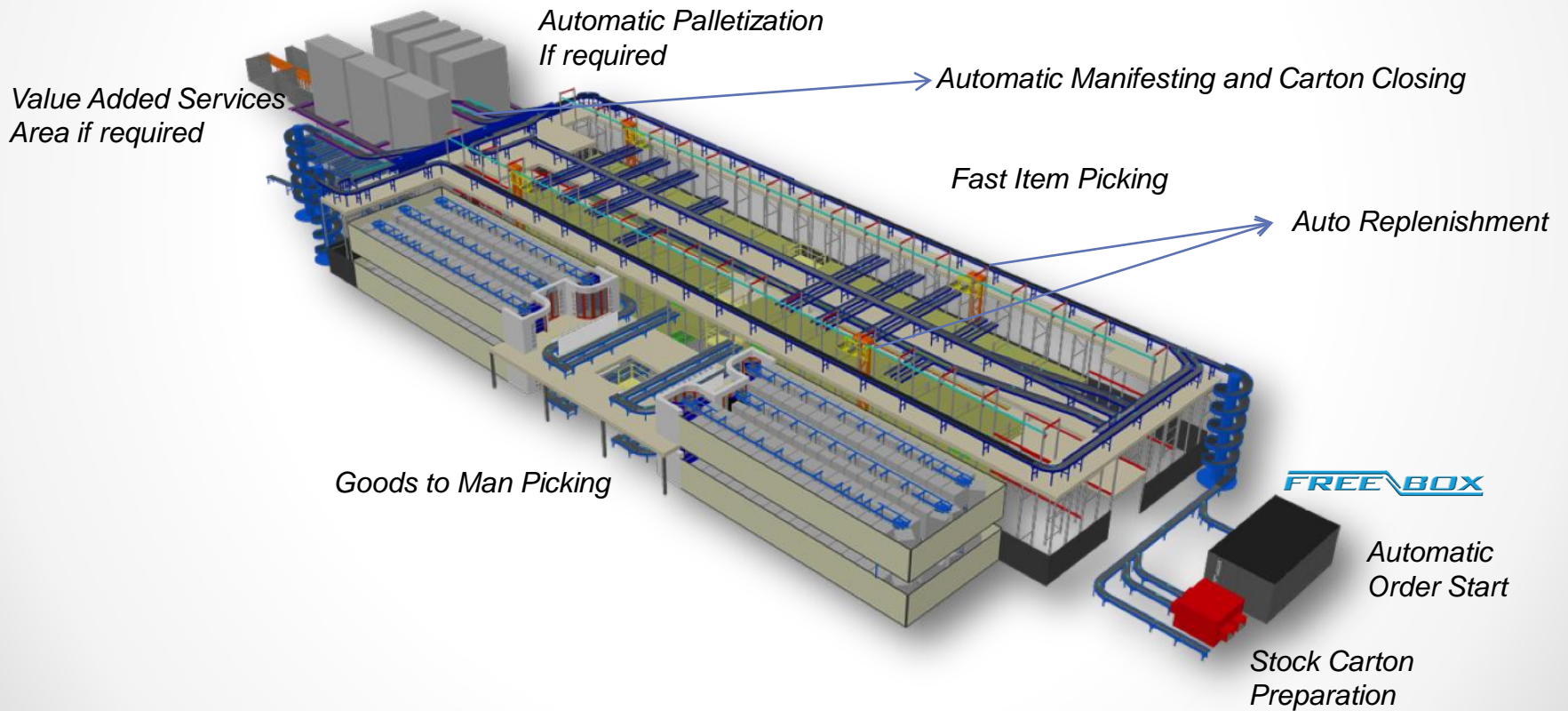


- Reduced cubic volume shipped
- Reduction in packing materials
- Reduction in packing labor (pick to shipper)
- Automated manifesting
- Automated carton closing
- **>35% Stronger box than standard fan-fold carton.**
- **Per Box cost:30% to 40% savings**
- **Almost no wasted corrugate**
- **Supplier independent**
- **On-demand printing**
- **Personalization / shipping labels**
- **Fully adjustable dimensions on all three axes**

Here's an example of Flexible Automation



Picking System Idea with On-Demand Box Making



Conclusion

- It's the **PICK, PACK** and **SHIP** process
- For decades, material handling automation was focused on picking automation (pick by light, pick by voice, goods-to-man approaches, etc.), while only improving the order packing process through ergonomic and process improvements
- On-demand packaging approaches can revolutionize the entire process. Not just by improving packing and shipping costs, but also by re-systemizing the entire pick, pack and ship process.
- And, there are multiple approaches that can fit almost any operation.

For More Information:

Tom Coyne, CEO System Logistics

www.systemlogistics.com

Visit ProMat 2013 Booth 2607