SHEDDING Excess

Box-making machinery helps Backyard Products reduce downtime and cut costs

A better way to package sheds, play-sets, and outdoor buildings — with Box On Demand

Backyard Products is the largest volume producer of sheds in North America, producing about 90,000 shed, playset, and outdoor building accessory kits per year. Celebrating their 40th anniversary this year, they have 32 branches across the United States and Canada that provide installation services for their customers.

Image: An operator makes the boxes needed for the next day's production

The Push Toward a New Packaging Solution

Prior to implementing the Box On Demand system, Backyard Products maintained over 50 different corrugated SKUs. To take advantage of volume discounts, they regularly ordered 1-2 months' of inventory across multiple SKUs, which took up valuable cash and manufacturing space. Unfortunately, many boxes were slow movers: as the production schedule changed, the boxes would sit for long periods of time. Boxes would become obsolete and Backyard Products routinely scrapped thousands of dollars' worth of material. With facility space at a premium, reclaiming storage space for value-added items became a priority. A just-in-time box making machine seemed to be the perfect solution to reduce box inventory, improve cash flow and gain floor space.

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> - Kirk Utemark
> V.P. of Operations

The Switch to On Demand Boxes

Backyard Products found working with Box On Demand to be very easy. According to Jim Beam, CPIM, Buyer – CI Coordinator, "The initial consultation and box analysis allowed us to compare the cost savings of producing packaging on-demand with our current process." After a thorough analysis showed significant opportunities to reduce corrugated costs and inventory, Backyard Products decided to move to creating their own boxes and began using up their existing box inventory before the machine was installed.

Machine installation and training took about two days. According to Beam, “The setup and training went well. The plan for implementation was very thorough and there was a lot of research done prior to installing the machine.” Box On Demand technicians worked with the Backyard Products maintenance team to hook up the machine, then ensured the operators were fully comfortable loading and operating the machinery. “This was the only machine we’ve installed that didn’t have startup headaches.” – Kirk Utemark, VP of Operations

Any Box, Sized Right, Every Time

Backyard Products initially planned to continue purchasing a limited number of box SKUs but were impressed with the machine’s capability to produce many different types of boxes. Beam’s biggest concern was that the machine would not be able to make every box size and type that they used, however, “We discovered that the machine has no problem producing any of our box SKU’s.”

Operators found the software very easy to use, and only minimal maintenance (occasional lubrication and light cleaning) is required. The machine has been extremely reliable and according to Beam, “has not caused a stoppage in production since being implemented.”

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Backyard Products has now customized a box for every single one of their products and currently produces over 100 different types of boxes on the Box On Demand machine. Beam says, “the machine gives us the flexibility to make any box that we need. We now issue work orders for boxes to be made the day prior to actual usage. This guarantees that these boxes will be used in a timely manner.”

Process Improvements and Improved Production Efficiency

Beyond just-in-time box production, installing the Box On Demand system allowed Backyard Products to significantly reduce box inventory which led to greatly

Top: The space Backyard Products previously used for corrugated storage now houses their Box On Demand Machine and boxes that have been made for the next production run.
Bottom: The current storage space for all their corrugated fanfold.

improved space utilization at their production facility. According to Utemark, “We were able to open up 1,000 sq. ft. of space that was previously filled with corrugate inventory. The machine is located where multiple racks of storage used to be, and the bales of fanfold corrugated take up a fraction of the space. They (the bales) stack like Legos®!”

Backyard Products has reduced their corrugated inventory by 75% and eliminated obsolescence (and its associated costs). Their overall corrugated scrap rate is less than 3%. After freeing up 50% of the floor space previously occupied by box SKUs, Backyard Products was able to reconfigure their pack lines and dramatically reduce the downtime associated with changing to a different production run.

Beam says all of these changes have improved their value proposition: “The just-in-time, right-size philosophy behind the machine allows us to keep our costs down and provide the customer with better value, while knowing the product will be protected in the boxes during transportation.