

CASE STUDY

North Spore Maximizes Space, Optimizes Fulfillment with Complete, Automated Fulfillment Solution

A producer of mycological supplies, equipment, medicinal supplements, and educational material for commercial and home growers used fulfillment line automation in their newly expanded production facility to accommodate their growth and exploding e-commerce business.

CHALLENGES

North Spore started in an old garage basement in outer Westbrook, that had been a marine mammal rescue center in 2014, mainly selling fresh mushrooms from their farm to restaurants.

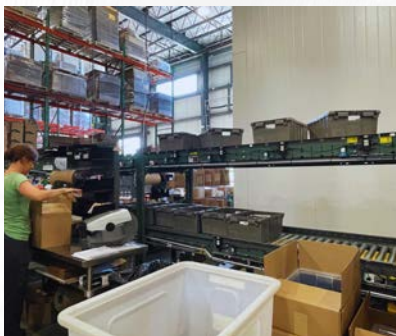


When their business shifted in 2020 with the pandemic, it quickly became a full-time e-commerce retailer. Selling directly to consumers wanting to grow mushrooms from home was a great business model for the pandemic and beyond. However, the business grew quickly and had such different space needs that North Spore quickly needed more. And the old mill they occupied in 2020 had several small spaces to move between and needed to be more conducive to expanding or designing a more efficient process.

So, North Spore moved to a new 25k sq/ft production facility that would house their operation, which included a clean lab, coolers, colonization area, production, packing, and shipping & receiving departments. After spending a year focusing on designing the production facility, they realized they needed to design an automated fulfillment operation. General Manager Mike Kersula toured some local businesses ranging in size to see how they managed their fulfillment operations. One company mentioned and highly recommended Abel Womack for material handling and fulfillment technology.

SOLUTION

North Spore has a rigorous contractor selection process and reviewed eight companies specializing in warehouse fulfillment and design services. Using a quantitative approach to determine the best company to work with, Abel Womack came out on top.



Abel Womack's team visited the production facility, reviewed the fulfillment plans, held highly effective virtual meetings to discuss the design, and laid out a plan to move goods more efficiently and safely through the facility. The plan included automated technologies that would make measurable

improvements. These included a Kardex Remstar vertical lift module (VLM) with temperature-controlled storage, a

takeaway conveyor system, and flow racking to create a picking cell allowing higher throughput.

Pallet racking for storage space with some case flow lanes also was added, along with a Raymond stand up counterbalanced forklift that could service their aisles and be able to go outdoors.

Abel Womack provided a conveyor system that was installed by North Spore near the raw material storage, streamlining the workflow and assisting with order processing. Having goods travel to the workstations and not having to walk or push goods saves time and labor. Although specifically efficient for high-velocity items, the installed PFlow rack was ideal for picking the oldest products first. A Kardex shuttle XP 500, installed in a cooler with dual access doors and LED lighting, holds 54 trays with multiple items that need storage at a specific temperature. An associate can load the VLM while another is picking orders simultaneously. An overhead conveyor was used to return totes. With Abel Womack's assistance, North Spore conceptualized, designed, and implemented the plans. They also drew plans for the cooler and consulted with the vendor to ensure a proper fit for the VLM.

BENEFITS

- Automated fulfillment operation
- Increased picking speeds
- Utilized vertical space

RESULTS

By installing a VLM in the cooler, Abel Womack effectively used North Spore's footprint, and the VLM is paying for itself. Mike said, "It also allows us to pick more than twice as fast in terms of units per hour and frees up valuable floor space



for other revenue-generating operations. In a 30-foot-tall facility, we only utilized the bottom ten feet of space. Abel Womack helped us expand vertically with a 26-foot-tall VLM and four pallet rack levels. As we look at growing vertically in this space, we'll partner with Abel Womack again."

When asked if he would recommend Abel Womack to others in the industry, Mike commented, "I probably wouldn't recommend Abel Womack to folks in our industry. I'd keep them just for us as a competitive advantage. But I'd recommend them to others because they're exceptionally good at communication and provide immense value."