

CASE STUDY

Bean Box Coffee



BEAN BOX[®] 

Business Background

Bean Box (<https://beanbox.co>) is a coffee subscription and gift company located in Seattle, Washington.

The company was founded in 2014 by Matthew Berk and Ryan Fritzky, former software engineers who wanted to fuel social connections and inspiration based on their love of coffee. The company works with 30 Seattle- and Portland-based independent coffee roasters, and every month they fill and process tens of thousands of bags of coffee, all shipped within 48 hours of roasting, to customers across the United States.



The appetite for Bean Box has been unprecedented, and its growth reflects that. When the company launched, it shipped boxes to 34 states within its first 30 days of operation; since then, the company has grown more than 100 percent every year. In 2017, Bean Box shipped over 33 tons of coffee, packaging whole bean coffee in over half a million 1.8 oz bags! The popularity of the service has led to an explosion in its gift box business, and 50 percent of Bean Box's manufacturing volume occurs in the last 45 days of the year.

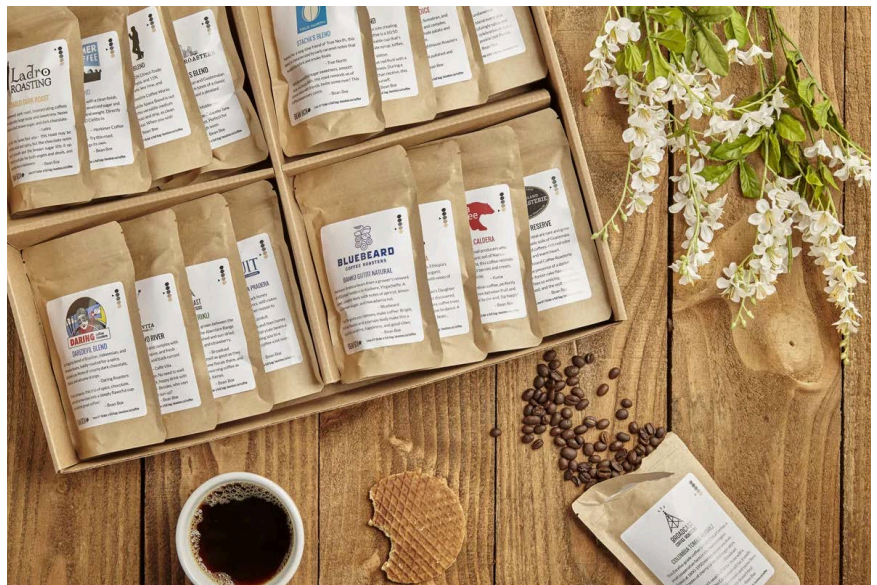
With the new solution, **Bean Box fills 2 ounce bags at speeds of 44 bags per minute and 12 ounce bags at 30 bags per minute.**

Critical Issues

In addition to the challenge of bagging tons of beans, Bean Box ships a large percentage of its sampler boxes to states without a robust local coffee roasting culture far from its home base of Washington.

To ensure freshness for the customer, it became critical that Bean Box have the ability to package coffee extremely quickly.

Like most newer coffee companies, Bean Box was packaging beans by hand using individual weigh and fill type scales. At the company's growth rate and with its commitment to shipping fresh coffee so quickly, hand packaging was not going to be a sustainable solution. After two and a half years of packing by hand, Bean Box realized that the time had come to invest in automated packaging equipment.



Part of the appeal of Bean Box is the beautiful, kraft packaging, and their single-brew pouches, which contain 1.8 ounces of coffee in a sealed standup pouch with degassing valve and zippered top. The bags are shipped in a branded corrugated cardboard box that demonstrates the company's commitment to freshness and quality. From a brand standpoint, it was critical to Bean Box for the automated packaging equipment to allow the company to keep its current packaging.

Strategy

To ensure that Bean Box's smaller, kraft coffee bags could be machine filled without wrinkling or tearing, Viking Masek first tested the bags at its facility in Oostburg, Wisconsin. Because Bean Box had been hand filling, the bags the company was using were only slightly larger than the amount of coffee to be placed inside the pouch. Viking Masek wanted to be sure that the amount of product promised to Bean Box's customers would fit inside a machine-filled package. "Manual packers can use smaller bags to package product because a person can easily bounce the package to encourage settling," explains Bryan Lacy, Director of Sales at Viking Masek. "Automated packaging machines can use settlers to replicate this motion, but generally need more head space at the top of the bag when filling pouches with product."

Fortunately, Viking Masek's rotary premade pouch machine was able to open and reclose the zipper seal and fill Bean Box's 2-ounce bags without either wrinkling or tearing the paper pouches.



Solution

Bean Box purchased a Viking Masek rotary premade pouch machine 8S-235, which they affectionately nicknamed "Biggie." The machine is equipped with a two-head scale for weighing and dosing product into premade pouches as well as a vacuum loader system for granular product to transport coffee from the bulk container up to the scale. The machine needed to fill two different size packages, 2 ounce and 12 ounce, with an accuracy of 0-3 grams over for the 2 ounce package and 0-6 grams over for the 12 ounce package.

Results

Once testing was complete, Viking Masek shipped the machine to Seattle and Bean Box had it running in full production within 1 week. Bean Box realized dramatic ROI almost immediately:

- Labor costs have been reduced from \$0.10 per bag to \$0.01 per bag
- Full ROI is expected within 6 months of deployment

Rather than spending their days in front of scales, scooping beans into bags, the Bean Box team can now focus on carefully presenting the sampler bags in beautifully assembled boxes, the kind of work that adds the most value to their customers.

With the new solution, Bean Box fills 2 ounce bags at a speed of 44 bags per minute and 12 ounce bags at 30 bags per minute. Changeover time between the two package sizes is less than 6 minutes, giving the company the flexibility to switch bag sizes as needed. Thanks to the new premade pouch machine, Bean Box will fill and ship over 1 million bags of specialty coffee in 2018. Plus, the company is confident that with its employees' newfound ability to focus on the customer experience and quality of the overall product, their growth will continue well into the future.



"It turns out that the decision to automate our bagging was really a no brainer given our growth. We are already scaling in ways which were previously impossible. **Our only lingering questions right now are what's next: another single rotary bagger, or a duplex!"**

~ Matthew Berk, Co-founder – Bean Box