

## Case Study:

## Helping Leading Cereal Producer Expand



### About This Case Study

Since Thayer Scale's founding seventy years ago, two philosophies have guided our strategy and operations:

- *Lasting product quality:* We aim to deliver high quality equipment that is "Built to Survive." We live by those words; our equipment is durable, lasts decades, and often outlives the process line in which it's installed.
- *Outstanding customer service:* We strive to provide best-in-class customer service to enhance and extend our equipment's productivity.

This customer case study, which centers on a highly-customized solution we developed twenty-seven years ago, illustrates these principles. Much of the original equipment described here is still in operation today.

### The Challenge

In 1990, our customer was a leading supplier of flaky cereals. While they primarily produced generic and private-label cereals, name-brand cereal makers often hired them to produce branded cereals on an as-needed, contractual basis.

As consumer tastes slowly shifted away from flaky cereals to healthier options, our customer's processing needs changed. New breakfast and snack products, such as granola-based cereals and bars, featured mixed and difficult-to-process additive ingredients like nuts, granola, and raisins. Over the years, our customer has purchased and updated Thayer Scale equipment to accurately proportion a variety of new ingredients into an existing product stream.

### The Long Term Process

Following the recommendation of leading cereal manufacturers, our customer first contacted Thayer Scale in 1990; their initial purchase included loss-in-weight feeders and weigh belts. Over the decades, Thayer's service and sales teams have worked closely with the customer's maintenance staff to maintain and update the original equipment to advance performance. (In fact, the customer's maintenance team respected the Thayer technician so much that they hired him to work at their facility!) Today—twenty-nine years later—much of the original equipment is still in use, including:

- Six out of seven original loss-in-weight feeders: Thayer engineers have worked closely with the customer to upgrade the controls, though the underlying feeder mechanics remain intact.
- Four out of twenty original weigh belts: These are still in use with the original design.
- Five out of twenty original weigh belts: These were replaced in 2010 with an updated sanitary design.

## Challenging Space Constraints Prohibit Expansion

In 1990, our customer's facility space left no room for expansion. It seemed virtually impossible for the customer to incorporate new equipment into the plant's already-cramped surroundings. They assumed only two expensive options existed for updating or adding equipment: (1) to secure new space and install a new processing line designed to support additives, or (2) to purchase custom equipment and hire pricey outside contractors to install it, incurring significant downtime (at a cost of thousands of dollars per hour).

### A (Surprisingly) Cost-Efficient Solution

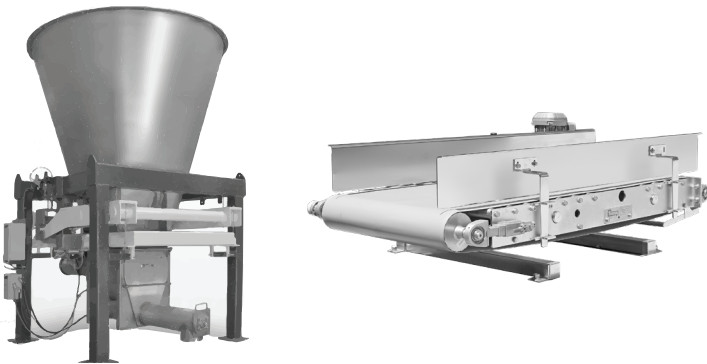
Thayer Scale executives visited the customer's facility to examine the "tight" environment. To the customer's delight, Thayer could retrofit their existing equipment, negating the need to hire outside contractors for in-house fabrication (and minimizing risk, downtime, and expense).

By changing belt widths, conveyor lengths and inclines, Thayer engineers developed a way to integrate seven loss-in-weight feeders and twenty new weigh belts into new and existing

cereal production lines over a twenty-four-year span. Additional custom enhancements included:

- Hoods to cover the conveyer (ensuring sanitation requirements were met)
- Integral inlet hoppers with shear gates for weigh belts
- Automated sampling gates at weigh belt discharge points for verifying feeders' flow rates and accuracy

## Timeline



### 2010: Modifying Standard Equipment

In 2010, five older-style weigh belts required a sanitary upgrade. Thayer Scale's expertise in custom work was widely-recognized, but could they (1) redesign standard equipment to work within an existing footprint with extremely tight width constraints ( $\leq 44$  inches) and (2) incline weigh belts to match collecting conveyors' height? Would the updated equipment uphold the cereal industry's rigid accuracy and clean in place (CIP) requirements? Finally, would the installation cause lengthy spans of downtime?

Thayer redesigned and updated five weigh belts to fit the original equipment's footprint and inlet-to-outlet dimensions exactly. The installation process caused very little downtime, minimizing costs.

### 2014: Evaluating ROI for Custom Work

In 2014, Thayer worked closely with the customer to design three custom additive processing solutions for raisins and two types of granola. Again, space constraints mandated the solution "fit like a glove." "Our custom solution rolled right into place," said Robert Villano, Thayer Scale's director of business development. "The custom weigh belts fit into the existing process line with minimal amount of rework and down time."

Due to the custom work, the cost of the customer's initial purchase order nearly doubled. Even so, the Thayer solution was less expensive than hiring outside contractors to modify equipment and space. Our customer calculated even with the higher-than-quoted cost, they would achieve ROI in just one to two years—that is, in 2015-2016. The equipment is now in its fourth year of generating returns.

## Who We Are

### Lasting Value

Thayer's mission is to provide customers with long-lasting equipment and outstanding customer service. As this case illustrates, our equipment contributes to profitability long after earning a return on investment.

**Built to Survive + Customer Service = Decades of Productivity and Profitability**

Thayer Scale, Hyer Industries Inc.  
91 Schoosett Street, Pembroke, MA 02359