CASE HISTORY



Thayer Scale Helps Improved Quality of Products at Chatham Village/ T. Marzetti Co.

The Background

About Chatham Village Croutons

Chatham Village Croutons are a brand of the T. Marzetti Company, the Specialty Food Group of Lancaster Colony Corporation. In 1896, Teresa Marzetti arrived in the U.S. from Florence, Italy and opened a small Italian restaurant in Columbus, Ohio. Marzetti's quickly became a local favorite and grew to become a four-star restaurant. Customers particularly enjoyed Marzetti's salad dressings and by 1955 they had become so renowned, that the upstairs kitchen of the restaurant became a fullscale factory. Thus, the Marzetti brand of salad dressings was born. After Teresa Marzetti's death in 1972, the restaurant was closed, but her passion for quality lives on in the Marzetti line of dressings and other specialty food products.

Chatham Village Croutons are unique because they are baked twice. Made from freshly baked French bread cut into tasty morsels, the croutons are then seasoned and baked again to create a delightful combination of flavor and crunch.

Challenge

Thayer Scale was contacted by a sales representative (who does not cover their line of equipment) to replace a problematic competitors weigh belt that was being used by Marzetti. The application was to accurately weigh prebaked croutons.

After several visits to the Marzetti processing facility in Wareham, MA, Thayer's engineers determined that the Model SI Insertion Weigh Belt module was the ideal weigh feeder for the application. This unique feeder is specifically designed to fit into a transition space between existing conveyors or equipment, which allowed the customer to easily insert the Model SI into the space where the original belt had been located.

The croutons move through a series of conveyors and then arrive at Thayer's Model SI, which accurately weighs the croutons, at a rate between 5,000 to 10,000 pph. (with a light material bulk density of 5.0 lb/ft³). The weight must be accurate, because the Model SI instrumentation sends a process signal to the customers' DCS system for proper proportioning of sunflower or canola oil as the croutons are fed into a seasoning drum coater. The proportion of oil is critical to the crouton-making process in order to achieve the proper texture and color.





Thayer's Model SI was chosen because the SI uses the Thayer Force Measurement Suspension System that mechanically mass-counterbalances out the conveyor portion of the weigh belt. The scale only measures the weight of the croutons that pass over it. Additionally, it was important that the flow rate of the croutons be precisely regulated due to oven restrictions. Previously variations in product flow led to unevenly and overcooked croutons.

Unlike before, the system now runs continuously and the croutons are baked to perfection. The installation began in August 2007 and was completed in October 2007.

Since the original installation Chatham Village has added a second line using using the same THAYER Model SI Weigh Belt in 2011.



Founded in 1949, Thayer Scale is a pioneering developer of continuous weighing and feeding equipment for the dry solids conveying and processing industries. Thayer's Belt Scales and Weigh Feeders of both the Weigh Belt and Loss-in-Weight types, cover an extremely wide range of applications in virtually all industries that involve dry solids conveying and processing. From Loss-In-Weight Feeders that feed vitamins into cereals at rates below 1 pound per hour to 6-Idler Conveyor Scales weighing coal at rates up to 10,000 tons per hour, there are more than 100 proven product variations available to suit most application requirements. Thayer Scale enjoys a unique reputation as a supplier of equipment that provides the rare combination of measurement precision and extreme robustness. Equipment installed more than 40 years ago continues to operate reliably and accurately.