

# CASE HISTORY



## PRE-BAKED CROUTON FEED SYSTEM



### **The Background**

MeMeMe is a division of Marcy's® located in Scarborough, ON Canada. Marcy Mihalcheon founded MeMeMe Inc. in 1999, inspired to start a company with a difference. Excellence, originality, value and integrity are the cornerstones of MeMeMe Inc. And these qualities inform every aspect of the company.

MeMeMe manufactures a line of Gourmet Croutons, stuffing mix and calabrese crisps which they sell under the name of Marcy's as well as under private label to a well know international restaurant chain.

### **Requirement:**

Accurately control the feed rate of pre-baked diced and sliced bread (croutons), stuffing mix and crisps into a seasoning coating drum.

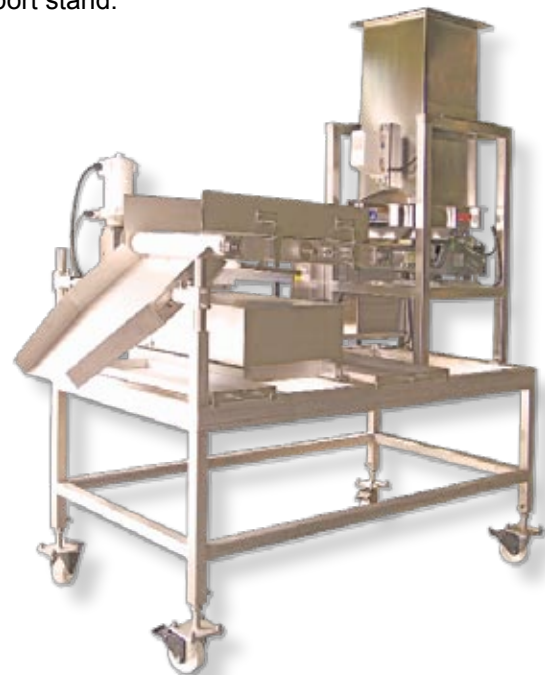
Marcy's® approached Thayer's local representative and asked if there was a way to accurately weigh and control the feed rate of pre-baked bread cubes used to manufacturer croutons and stuffing mix and bread slices used in the manufacturer calabrese crisps products. The material must be fed at a controlled feed rate (250-1,000 lbs/hr) into a seasoning drum for applying cooking oil to product surface.

A crouton is diced or sliced bread cubes and as you can imagine dice or sliced bread is not a free flowing material. Pre-baked bread cubes and slices have a very low bulk density, highly compressible and the "cubes" interlock very easily. Problem was designing a storage hopper that would prevent material bridging, controlling the flow of material out of storage and selecting the proper type of weighing equipment that can accurately measure the light density material.

### **The Solution:**

Marcy's® sent to Thayer Scale representative samples of the pre-baked croutons cubes. After a series of lab tests it was determined that a specially designed hopper would be required. The hopper design allowed the interlocking material to flow through the hopper onto vibratory feeder pan without damaging the product and assuring uninterrupted flow. The electromagnetic, variable speed vibratory feeder then feeds the pre-baked croutons cubes and crisp slices onto a THAYER Model "SI" Weigh Belt.

The SI Insertion Weigher uses Thayer Scale's precision flexure plate suspension scale with FMSS technology. The scale provides for complete mass counterbalancing of the dead load of the conveyor permitting the load sensor to react only to the net material load. This is especially important for weighing light density material in a low feed rate application. We used a THAYER Series 5200 instrument to monitor and control the flow of material from the vibratory feeder to match the required material set point for precise feeding into the seasoning coating drum. All components were supplied in sanitary, stainless steel and mounted to a common, portable support stand.





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.