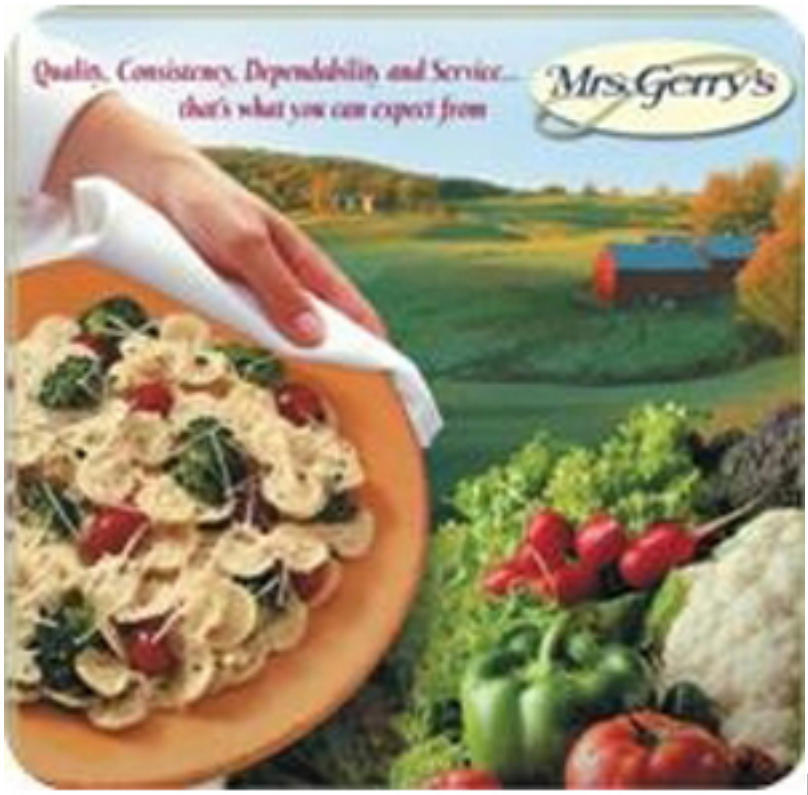
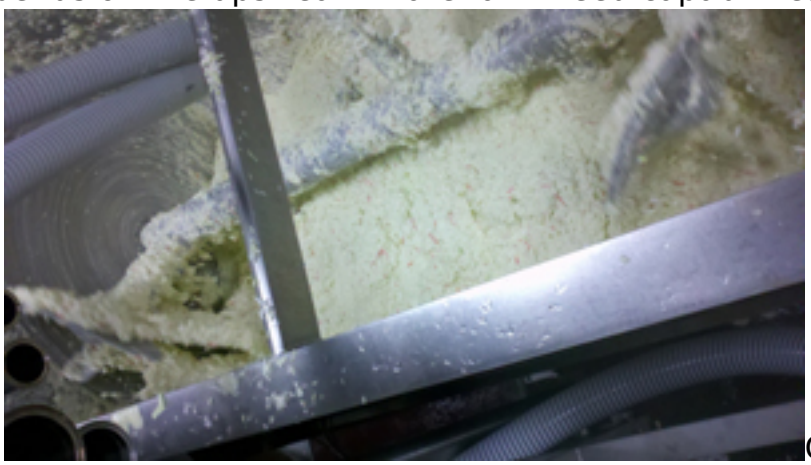
Creating the ‘Wow!’ Effect



Mrs. Gerry's Kitchen, located in Albert Lea, Minnesota, manufactures salads for grocery, restaurant and deli customers in a 17-state distribution area of the Upper Midwest. Their state-of-the-art 85,000-square-foot facility produces more than 100 products, from salads to entrees, dips to desserts and mashed potatoes. Coined “The Best in Salads,” Mrs. Gerry's is a leader in its industry in quality, consistency and product innovations. The company employs almost 150 people and is recognized as one of the best places to work in Minnesota.

Creating the “wow!” effect is key with deli salads. Consumers buy with their eyes, so it’s crucial to get the right mix of major and minor ingredients for a product to achieve the right texture, color and consistency. Mrs. Gerry's found answers in a new sanitary-compliant mixer based on the Marion Mixers Sanitary Equipment Standard. Marion Mixers is located in Marion, Iowa. Successful mixing not only blends ingredients, but also protects them from heat or mechanical actions, and preserves the stability of emulsions for longer shelf life. Marion’s new sanitary-compliant mixers achieve success with three distinctive features.

Paddle-style agitators are designed to mix solids, pastes and slurries with ingredients of dissimilar size, shape and density. Paddle-style mixers provide the same mix efficiency with batch sizes ranging from 20 to 100 percent of the capacity of the mixing vessel. Solids, pastes and slurries can be mixed in volumes at a 20 percent minimum fill rate and still achieve 100 percent efficiency; depending on the product, this can lead to significant dollar savings over previous systems.

The mixing process depends on the upstream material in-feed capabilities of the line. For example, Mrs.  Gerry’s manufactures recipes such as pasta salad with whole peas, cole slaw with pre-weighed vegetables, and potato salad made from potatoes and other minor ingredients mixed with mayonnaise. A typical batch cycle in the Marion sanitary equipment mixer for a potato salad recipe is about 10 minutes: seven minutes to load, two minutes to mix and less than a minute to discharge. Mrs. Gerry’s can process six 5,000-pound batches per hour. The potatoes and other fragile ingredients are not damaged due to the low-shear mixing of the paddle-style agitator.

Variable-speed drives used at low speed allow Mrs. Gerry’s Kitchen to slow the “tip speed” of the agitator to reduce breakage of friable ingredients or splashing of liquids. Alternatively, the very same agitator can be used at high speed to aerate product for drying, cooling or coating. Many existing designs are single speed and thereby limited to one production process. Processors want high volume, but must pass it through in a limited time. Variable-speed drives help control batch mixing cycle times for better blending efficiency.

Major ingredients, such as sliced potatoes for potato salad, are loaded into the mixer in four 1,200-pound totes. Other minor ingredients are added and weighed by the mixer’s Fairbank load cell system according to the recipe. The mayonnaise is pumped into the mixer based on

the formula and controlled by the load cell, which will shut off the pump when the right quantity has been achieved. The ingredients are mixed with the sanitary paddle-style agitator and discharged through the slide-gate discharge valve designed for easy demounting and cleaning. The removable shaft seal is also designed for easily cleaning and inspection.

Especially with a potato salad, it’s important to get the mayonnaise pumped into the mixer trough at the right time, coordinated with the correct agitator speed to achieve a thorough ingredient mix. Marion Mixers engineers worked with Mrs. Gerry’s plant operators as the system was commissioned to get all these details right. The “Wow!” effect extends to our customers through the trust built by this kind of customer service.

For more information, please visit www.marionmixers.com *[1].*

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