TRICOR
Coriolis Technology

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APPLICATION SPOTLIGHT

Mayonnaise Manufacturing - Material Blending

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APPLICATION DESCRIPTION:

This customer is a large scale producer of condiments for the restaurant industry. In the manufacturing of mayonaise, several ingredients need to be mixed at exact ratios to produce a consistent product. The customer is automating the process to remove human error from the mixing of these blends. Products to be measured are starch, an egg blend, and the final product of mayonaise.

TRICOR PRODUCT SUPPLIED:

TCM-3100 Coriolis Flow Meter

CHALLENGE:

All the ingredient measurements must be made by sanitary instruments because this is an FDA regulated food application. Measurements must also be maintained at relatively low system pressures. This is difficult due to the viscous nature of the product. Because both starch and mayonaise are shear thinning materials, precise viscosity data is not available, therefore engineering observation of the process was necessary to identify the proper size Coriolis meters.

SOLUTION:

The TRICOR Coriolis meters were recommended for this application because of the “no moving parts” design. The meters were custom made, with end-to-end length and Tri-clamp flange sizes specified per the customer’s request. Sanitary requirements were met with the smooth 316SS tubes of the Coriolis meter. Pressure drop was kept to a minimum by sizing the meters appropriately for the viscosity of the media flowing through them.

RESULTS:

Taking human error out of the equation has allowed the product to be marketed as consistent from batch to batch, something their competitors cannot currently do. Controlling the process has resulted in pleasing their nationwide customers.