



APPLICATION SPOTLIGHT
CHEMICAL MANUFACTURING - ADDITIVES BLENDING



Chemical Manufacturing – Additives Blending

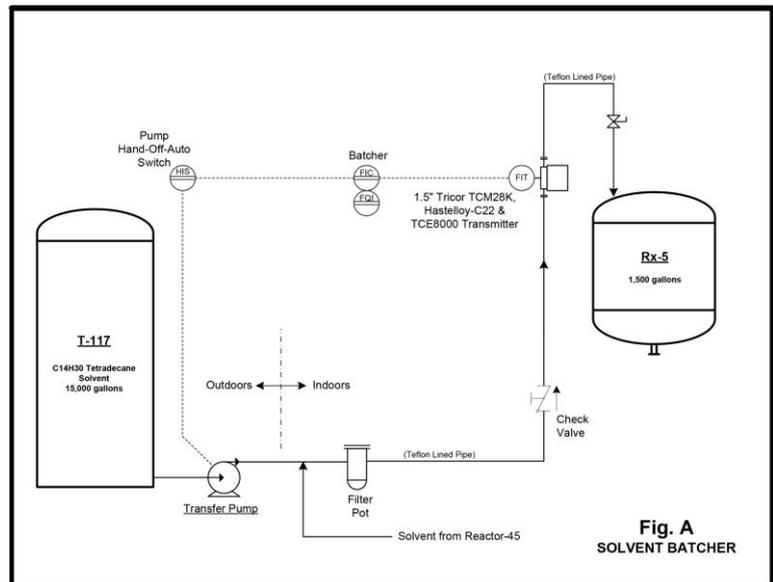


APPLICATION DESCRIPTION:

This customer manufactures chemical specialty products for lubricant additives, paints, coatings and adhesives, plastics, rubber, and textile markets worldwide. One of their 1,500 gallon reactors was operating with an antiquated solvent charging system that needed to be replaced. The job of the solvent batcher was to add 600 gallons of solvent into the reactor at the start of each batch.

TRICOR PRODUCT SUPPLIED:

TCM-28K Hastelloy Coriolis Mass Flow Meter with Integral Transmitter



CHALLENGE:

The additive solvent contains tetradecane (C14H30), small amounts of chlorine, and strong traces of 100% hydrochloric acid, flowing at 38°C (100°F). Because of the strong HCL acid content, the meter had to be made of Hastelloy-C22 or tantalum. The tetradecane solvent is 3 cP viscosity, making it flow at a very low flow rate and results in a low Reynolds number.

SOLUTION:

Coriolis flow measurement was the only practical solution for this application. TRICOR's TCM-28K Coriolis meter was chosen for this application because it is offered in Hastelloy, it met the specifications for accuracy and repeatability, and it was competitively priced.

RESULT:

The TRICOR meter was easily installed with very minimal piping changes required. The customer is very happy with the meter's performance, having proved its accuracy by comparing multiple 600-gallon batches against liquid level decreases in the solvent storage tank.