



APPLICATION SPOTLIGHT

Chemical Manufacturing – Dimethylformamide



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APPLICATION:

Production of Dimethylformamide (DMF).

DMF is a clear liquid organic solvent used in a number of industrial processes, particularly in the manufacture of polyurethane products, pesticides, electrical equipment, pharmaceuticals, and synthetic leathers and fibers.

Conditions:

- Medium: DMF
- Pressure: >4 bar
- Density: 995 kg/m³
- Viscosity: 2 cSt
- Flow range: up to 20,000 kg/h on output lines
- Flow range: up to 50,000 kg/h on gathering line

PRODUCT SUPPLIED:

- TCM 28K Coriolis Mass Flow Meters
- TCM 65K Coriolis Mass Flow Meters

CHALLENGES:

For almost 10 years, the customer used EMF (Electromagnetic Flow Meters) with 0.5% inaccuracy. The process material consumption was controlled volumetrically, whereas the finished product was calculated only on weight, moreover the product was also sold based on weight. The downside for the customer was the fact that he was not able to control the efficiency of his production by means of proper input and output calculation based on weight.



SOLUTION:

With TRICOR Coriolis Mass flow meters, the customer was able to diligently control product output based on the mass flow information. With the extra feature of the integrated density measurement option, the customer was also able to control the product quality better than in the past.

RESULTS:

The excellent accuracy of the TRICOR Coriolis Mass flow meter enabled the customer to:

- Save raw material during production
- Lower production costs
- Improve product quality