



# APPLICATION NOTE

**INDUSTRY: FOOD**

**MARKET NICHE: BAKERY**

**PRODUCT: DC-F POSITIVE DISPLACEMENT FLOWMETERS**

**FLUID: YEAST**

**SERVICE: CUSTOMER FIELD TESTING • VISCOSITY: 6 cP**

## SITUATION

A major food products manufacturer in October 1988, laboratory tested a Flow Technology positive displacement meter in series with the major brand of coriolis type mass flowmeter. The Flow Technology meter was a model DC05F-6114-5405-000 with Kynar® impellers.

As with all Flow Technology meters, this meter was calibrated prior to shipment. Flow Technology test results showed a linearity of  $\pm 0.6\%$  over a 10:1 turndown. This of course could be vastly improved by K-curve linearization with the batch controller.

## SYSTEM DESCRIPTION

The Flow Technology meter and the other meter were then customer field tested on a yeast product with a viscosity of about 6 cP at an operating temperature of 35° F (0.67° C). After the testing was completed, the research engineer reported that the Flow Technology meter was "... slightly less linear at low flow rates, but for practical purposes there was no difference." This was without using the linearization capabilities of the batch controller. The engineer went on to say that the Flow Technology meter is "... superior for sanitary applications because it can be cleaned." Also, "... it's only two-thirds the cost ..." of the other meter.



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