



APPLICATION NOTE Food & Beverage

Flow control of minced meat

- Monitoring the consumption of raw materials
- Coriolis mass flow measurement of poultry meat at a low flow velocity
- Fully compliant with hygienic requirements

1. Background

A French company specializes in the treatment of minced poultry meat. A new continuous process developed by their research center requires a continuous control of the flow of the raw materials in the cooking line.

2. Measurement requirements

The minced poultry meat is processed at a very low flow rate of 1500 kg/h (55.1 lb/min), at a pressure of 2 bars / 29 psi and a density of 1126 kg/l (ca. 9397 lb/gal US) at 45 °C / 113 °F. Its viscosity is relatively high. Controlling the flow is crucial to prevent underfeeding or overfeeding of the cooking system.

3. KROHNE solution

KROHNE installed 3 OPTIMASS 7300 C (T40), a flowmeter with a DN40 / 1½" single straight tube made of titanium.

The meter is oversized on purpose, in order to avoid excessive pressure drop, and was still expected to provide a stable and reliable measurement for a good flowrate regulation.

The customer trusted KROHNE and purchased a first meter with performance guaranties to be tested in their research center.

4. Customer benefits

The customer is very satisfied.

The OPTIMASS 7300 C enables a smooth production of minced meat. Its single straight tube design fully complies with the hygienic requirements of the customer.



5. Product used

OPTIMASS 7300 C

- Coriolis mass flowmeter with single straight tube for demanding applications with minced meat
- Mass, volume and density measurement of viscous and pasty ingredients in food production
- Hygienic design: 3A and EHEDG certified, suitable for SIP/CIP
- DN10...100 / ½...4"; max. PN100 / ASME Cl 600 lb
- -40...+150°C / +300°F
- Immunity to crosstalk: resistant to installation and process effects
- HART®, FOUNDATION™ fieldbus, PROFIBUS® PA and DP, Modbus



Contact

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