



Application Spotlight

Dosing of cutting oil in the industrial production of sliced bread

A HOMOGENEOUS, THIN CUTTING OIL FILM IMPROVES THE CUTTING RESULT

Technical Data

Medium:	Cutting oil (SG-oil)
Temperature:	25 °C [77 °F]
Pressure:	200 bar [2,900 psi]
Measuring range:	2.4 l/min
Viscosity at 20 °C:	60 up to 150 mPa*s
Density at 20 °C:	0.91 up to 0.93 kg/dm ³

Application

The great-grandmother used to press the large, four-pound loaf of black bread against the apron and cut it off slice by slice. Today bread is often cut industrially. When making sliced bread, the blades of slicing machines must not stick to the partly sticky bread. To achieve this, the moving metal parts of the slicing machine are continuously sprayed with a cutting oil consisting of vegetable oils, e.g. rapeseed oil. Cutting bread is a technical challenge for cutlers and machine builders even in the 21st century.

Solution

Spraying with oil creates a homogeneous, thin cutting oil film which improves the cutting result. A TRICOR Coriolis Mass Flow Meter is used for precise and reproducible dosing of the cutting oil. The economic version with TCE 6000 electronics is particularly suitable for this application. Here the actual values are evaluated directly via 4 ... 20 mA output signal without the need for an additional on-site display.

Advantages

- High measuring accuracy
- Mass based measurement result independent of density and viscosity
- Reduction of the cutting oil consumption
- Space-saving, electronics without display
- Good price-performance ratio
- Wear-free



Certificates:

- Pressure Equipment Directive 97/23/EC, 2014/68/EU
- HPO - Certification
- Explosion protection according to 2014/34/EU
- CSA/UL - Certification
- Accreditation according to ISO 17025



Coriolis Mass Flow Meter
(TRICOR CLASSIC Series)