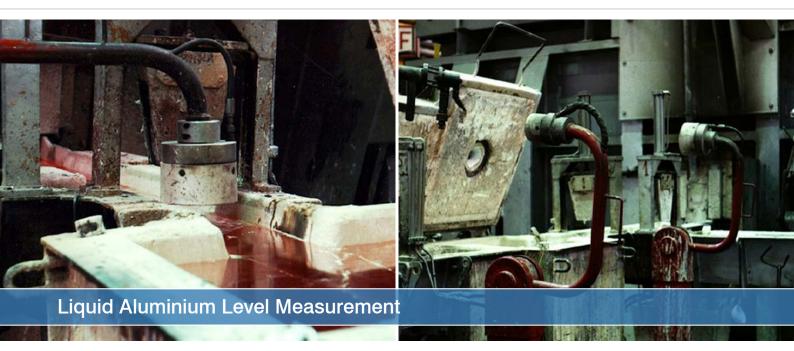
# A009 Eddy current sensors eddyNCDT





To obtain a homogeneous oxide-free aluminium die cast, the aluminium level in the open mould must be kept constant to within 1mm. A constant level is achieved by controlled tilting of the furnace. The current level is measured and monitored from above with air-cooled eddy current sensors. A temperature-stable output signal and the high operating temperature of the eddy current sensors are particularly significant in this measurement.

### Requirements for the measurement system

- Measuring range: 40mm (80mm)
- Accuracy: ± 0.08mm (+ 0.16mm)
- Resolution: 4μm ( 8μm)

### Ambient conditions

## Temperature: 720°C

Medium: liquid aluminium

### Reasons for choosing the system

- Eddy current systems work for non-ferromagnetic metals as well as ferro magnetic
- Large measuring ranges
- Robust sensors for harsh environments (found- ries)
- Good temperature stability
- High survival temperature (150°C)

#### System design

- = DT3300
- = U40 sensor
- = U80 sensor