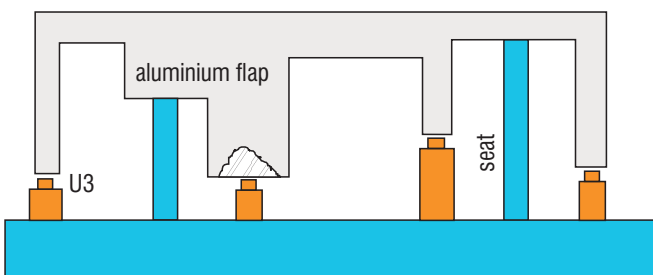


## Bending/smoothness of Aluminium cast covers

After AL covers have been cast and prior to milling of the sealing surface the covers must be manually straightened and sorted into OK/NOK. This operation takes place in a rough environment (casting bay). The measuring technique that was used earlier (probes) are subject to a high degree of wear and had to be replaced in regular intervals. In order to minimise spare parts costs the customers have decided in favour of the non-contacting and non-wearing eddy-current measuring system. What is of special importance for the success of this measuring method is the fact that eddyNCDT eddy-current sensors, due to the possibility of 3-point-linearisation, supply reliable measuring values even with complex target geometries.

### Principle



### Technical details

- Measuring range: 3 mm
- Accuracy:  $\pm 0,05$  mm
- Resolution: 0,01 mm
- Band width: static

### Ambient conditions

- Temperature: 15 - 35 °C
- Medium: air
- rough ambient (foundry)

### System configuration

- GH584 - housing
- MF584 - 8-channel-mainframe
- DD500 - digital display
- OS510 - oscillator
- DL500 - demodulator
- U3 - sensor
- C3 - sensor cable
- BCX-U3A - matching board

### Reasons for choosing the system

- Eddy-current sensors operate in the roughest environments
- Non-wearing measurement
- No spare parts costs
- Easy compensation due to 3-point-linearisation against uneven target geometries
- Aluminium is especially suitable as a target