



# castxpert

## Excellence in Mould Level Measurement

### Sets standards in continuous casting

castXpert is the state of the art mould level system, combining highest technological know-how from 60 years of experience in radiometric measurements with the application-specific requirements of this measuring task. The sophisticated system has been developed in cooperation with our partners in the worldwide steel industry and is fully suited for the continuous casting process with its highly challenging measuring conditions.

The very unique feature of castXpert is its own "intelligence". castXpert is not just a measuring system but a sophisticated instrument, effecting a simple casting process and ensuring highest reliability - the basis of a constant mould level.

The high quality standard of this product and its components ensures extremely reliable measuring results and many years of highly and continuously accurate mould level measurement.

## Innovative Highlights

### steady communication

The evaluation unit is in continuous contact with the detector. It polls temperature data and controls the current state of the probe.

### quick and reliable

5ms cycle time! The shortest cycle time available for a better control of your process.

### new source design

individual source design with extremely high resolution in the critical part of the measuring range. It is therefore more sensitive in the critical part whilst applying a very low source size.

### easy operation

a colour display with touch screen and the customer-oriented software ensure easy operation as well as a simplified calibration procedure.

### data log

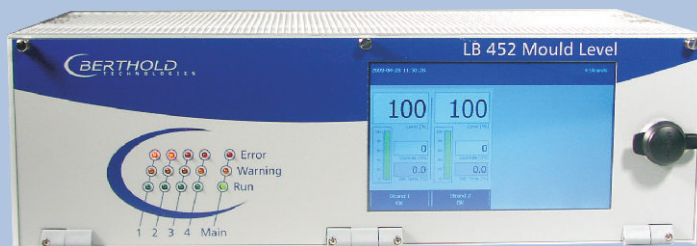
the temperature data, as well as the measuring values, are stored in the data logger, providing further information of the process.

### highest product safety

every measuring channel is equipped with its own power supply and is therefore working independently.

### your options

- Up to 4 measuring channels, served by one evaluation unit
- Extension board including second current output, additional relays and digital inputs.
- Profibus PA

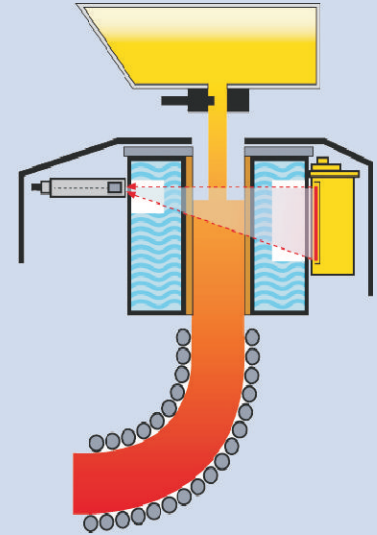


## castXpert

### - one-stop solutions

#### The castXpert system comprises:

- castXpert evaluation unit
- GAMMAcast, extremely durable detector for continuous casting applications
- Cs-137 rod source



#### BERTHOLD service

Our well-versed project engineers are pleased to arrange the optimal measuring solution, according to your individual application, considering your requirements and particular measuring conditions.

## Transmission Method

Gamma radiation is attenuated as it passes through matter. This attenuation is measured by a detector. As the mould and the wall thicknesses are constant, the radiation is only affected by a change of mould level.

The radiometric measuring technique is non-contacting, and irrespective of temperature, dust or vibrations. Maintenance is not required.

## Technical Data castXpert LB 452

Design	19" module 3HE, 21 TE protection class IP20 for up to 4 measuring channels
Weight	approx. 6 kg
Power supply	90 - 264 V
Power consumption	approx. 10 VA / measuring channel
Operating temperature	-20°C to +50°C (253 to 323 K)
Storage temperature	-30°C to +70°C (243 to 343 K)
Time constant	0.005 to 1000 s
Long time stability	< +/-1%

