MOLD CHECKER LONG
MEASUREMENT OF MOLD SURFACE AND FOOT ROLLS FOR LONG PRODUCT CASTING MACHINES

BENEFITS
By measuring the 3-dimensional contour of a mold, it is possible to observe the wear during lifetime, estimate the lifetime of the mold and to measure and properly adjust foot rolls. Correctly adjusted mold tapers minimize the probability of breakouts. By knowing about scratches and the deviation from the set point geometry, the best time to exchange mold plates can be determined in order to prevent breakouts and save money. Newest laser technology makes it possible to acquire all the mold relevant data with only one measurement device that measures contactless and fully automatically.

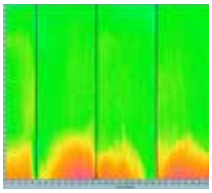
FIELD OF APPLICATION
Mold Checker is a single device for several different mold formats, as well as a single device for the measurement of molds and mold foot rollers at continuous slab casting machines. A particular version, Mold Checker slab, is available for use in slab caster molds.

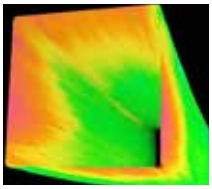
FUNCTION
The linear unit stops the laser at user-defined depths of the mold and measures each section by rotating the laser. The sections to be measure can be defined individually in steps of 5 mm. Optimal performance is ensured by using small steps (e.g. 5 mm) in interesting regions (meniscus, bottom of mold) and bigger steps (e.g. 50 mm) in the regions in between.

Optional
For foot roll measurement, the measurement unit moves further down and measures the position and alignment of the foot rolls. The measurement data are stored automaticallv. so analvses can be done at a later date.

PRODUCT STRUCTURE

Measurement unit with calibration ring, the unit's base will be adapted to fit the customer molds
10 m connection cable between evaluation unit and measurement unit
Evaluation unit (laptop) with software to control the measurement unit and for data evaluation
Case for measurement unit





TECHNICAL DATA

Laser class	2 (not dangerous for human eye)
Measurement range	120 mm
Resolution	7.4 µm
Linearity	±0.02% (±0.08% max)
Measurement frequency	1.25 Hz
Temperature stability	0.01%/K
Duration of measurement	depends on number of measured cross sections (customized) typically < 5 minutes
Measuring time per cross section	5 to 10 s
Measurement points per cross section	approx. 6,000
Repeat accuracy	± 0.08 mm
Operating temperature	10 – 35°C (PC) not cond. 0 – 50°C (electronics)
Storage temperature	-20°C to +60°C

SERVICES

- Commissioning advisory
- Training
- Spare parts

OTHER CUSTOMERS BOUGHT ADDITIONALLY

- Gap Checker
- Strand Checker
- OsciChecker
- Mold Checker slab
- Taper Checker
- Mold Expert
- Thermocouple Checker
- Mold SurfaceMon

Primetals Technologies Austria GmbH
A joint venture of Mitsubishi Heavy Industries and partners

Turmstrasse 44 | 4031 Linz | Austria
primetals.com

Order No. T03-4-N133-L2-P-V2-EN
Printed in Linz | © 2020