



A future-oriented laser measuring system for CNC machining centres

BLUM
focus on productivity



Laser measuring system for CNC machine tools that is unique worldwide for non-contact tool measurement and tool monitoring under the harshest conditions. Unbeatably fast, precise and reliable thanks to the latest DIGILOG technology, premium laser optics and perfected BLUM protection system.

The world's most advanced laser measuring system

- Highly dynamic measurement of all tool parameters
- Non-contact measurement of all tool types, shapes, and cutting materials
- Recognition of changes in geometry such as tool cutting edge wear
- Consistently good part precision through process-integrated temperature compensation
- Reliable compensation for spindle drift and runout errors
- Run-out monitoring detects bad tool holders and soiling
- Low-manpower, automated operation
- Protected by patents

Unique DIGILOG Technology

- Up to 60% less measuring and checking time
- Thousands of measuring values of all tool cutting edges per second
- Evaluation of a data stream
- Dynamic adjustment of the measuring speed according to the nominal tool rpm
- Automatic filtering of dirt and cooling lubricant residue on tool
- DIGILOG calibration with integrated run-out monitoring
- In-process reliability under coolant in a new dimension

Premium laser optics & protection system

- High-end laser optics for optimum performance under the harshest conditions
- Repeatability in nanometre range
- Maximum absolute accuracy with focused laser beam
- Measurement of micro-tools and very small cutting edge geometries
- Maximized homogeneity of beam shape for optimum results even under coolant mist
- Absolute accuracy better than all comparable measuring systems
- Extremely powerful stream of barrier air to provided optimum protection for the optics
- Explosive cleaning of the aperture

Technical Data LC-50 DIGILOG						
System length	150mm	200mm	260mm	300mm	400mm	500mm
Max. Tool Ø*	36mm	120mm	314mm	498mm		
Min. Tool Ø*	5***/15 µm	20 µm	30 µm	37 µm	49 µm	66 µm
Repeatability**	0.2 µm 2σ	0.3 µm 2σ	0.4 µm 2σ	0.5 µm 2σ	0.7 µm 2σ	0.9 µm 2σ

* Risk of collision if tool diameter exceeds opening width. Observe the operating manual!

** Depending on the installation situation and stability of mounting *** 5 µm possible, with adaptation of software parameters

Additional information can be found in the relevant brochure and in the operating manual.

LC50-DIGILOG

The laser measuring system LC50-DIGILOG is offered as standard in lengths from 150 to 500 mm. Custom lengths and heights available on request.

* The above specifications are subject to change without prior notice, no liability for mistakes. Machines may be shown with optional equipment.