



Tool Measurement



DIGILOG Technology



Tool Breakage Detection



Tool Length Measurement



Tool Radius Measurement



Single Cutting Edge Monitoring



Wear Compensation



Temperature Compensation



Laser measurement system **LC53-DIGILOG**

SYSTEM WITH SEPARATE TRANSMITTER AND RECEIVER UNIT

BLUM
focus on productivity



Laser measurement system LC53-DIGILOG

SYSTEM WITH SEPARATE TRANSMITTER AND RECEIVER UNIT

Modular laser measurement system for flexible installation in the work area

In-process reliability and precision. The newly developed single laser measurement system is used for non-contact tool measurement and rapid tool monitoring in CNC machining centres. Like all current laser measurement systems from BLUM, LC53-DIGILOG features the forward-looking DIGILOG technology, highly precise laser optics and a unique protection system.

- No interfering contour in the working area when installed on the machine wall
- Higher flexibility in specification of the measuring position
- Non-contact measurement of all tool types, shapes and cutting materials
- DIGILOG calibration with integrated run-out monitoring

Your benefit:

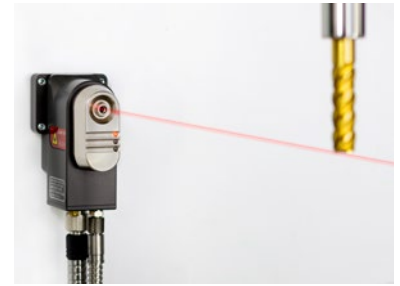
- Superior in-process reliability with coolant
- Less measuring and checking time
- Consistently good part precision through process-integrated temperature compensation
- No secondary damage due to unrecognised tool breakage
- Compatible with the LC-VISION visualisation and analysis software
- Innovative quick mounting system
- Only two connecting lines

Fast. Precise. Reliable.

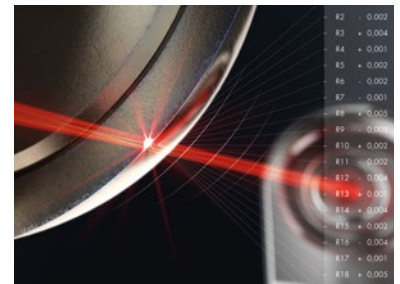
Digital is outdated – the future is DIGILOG. With the introduction of DIGILOG technology, BLUM has revolutionised laser measuring technology for machine tools. This method results in an extremely large number of measuring values in a very short space of time, making tool measurement more precise, fast and reliable than ever before.

- Thousands of measuring values per second of all cutting edges of a tool
- Data stream analysis
- Automatic filtering of dirt and coolant residue on the tool
- Dynamic adjustment of the measuring speed to the nominal tool rpm

System overview



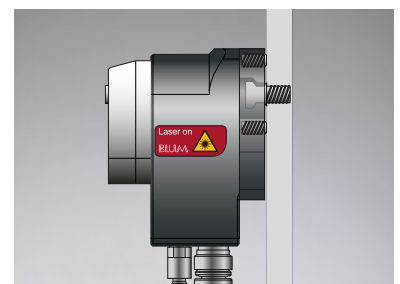
Flexible installation on the machine wall by means of a separate transmitter and receiver unit



Thousands of measuring values per second



Unique protection system



Intelligent mounting system for easy installation

System distance	500 mm	1000 mm	1600 mm	2200 mm
Minimum tool Ø (breakage)	0.4 mm	0.5 mm	0.5 mm	0.7 mm
Minimum tool Ø (measurement)	1 mm	1 mm	1 mm	1.5 mm
Repeatability	2.5 µm 2σ	4.5 µm 2σ	6 µm 2σ	10 µm 2σ