





## High-precision and dynamic multipoint inline measuring technology for brake discs and brake drums

The multipoint measuring machines are designed to ensure a 100% quality monitoring and process control in an environment of constantly increasing requirements regarding precision and productivity in production. Their ability of static and/or dynamic measurements include fast acquisition of all measurement characteristics in a single rotation within the production cycle. Every individual workpiece is checked (verified) with full traceability, extremely high accuracy and reliability. Even under extreme conditions such as casting dust or temperature drift a reliable quality control is guaranteed.

## Your benefit:

- High availability thanks to extremely durable and long-lasting design
- Can be fully integrated into the production lines
- Automation by means of interlinkage, conveyor, shuttle, robot or gantry
- High precision due to optimum arrangement of the measuring sensors
- 100%-measurement with statistical quality control within the production cycle
- Precision and reliability, even in harsh production environments
- Measuring testing automation | complete solutions from a single source



Dynamic measurement with acquisition of all measurement characteristics in a single rotation



Precise inside measurement of brake drums

## Technical data\*

Workpiece dimensions	as per parts spectrum   standard Ø 250 - 450 mm
Workpiece weight	as per parts spectrum   standard up to 25 kg
Repeatability	≤ 1 µm
Temperature range of workpiece	15 °C to +65 °C
Temperature compensation	integrated for machine frame   optional for workpiece
Workpiece support	measuring spindle with centering device
Sensor system	tactile
Measuring procedure	static   dynamic   combined
Workpiece rotation	precision measuring spindle
Control panel	panel PC with measurement/evaluation software and HMI
Control system	independent PLC
Correction	optional with correction interface
Calibration	by calibration master
Level of automation	fully automated
Application field	mid-   high-volume production
Temperature range in environment	0 °C to +45 °C
Weight	approx. 1500 - 2500 kg (depending on version)



100% quality monitoring and control within the production cycle



Fully automated in-line measuring system with labelling system and statistics PC

<sup>\*</sup> Special versions on request