Customer focused development

- spindles + slides
- plan-tables + instruments
- machines
- micro cutting technology



Profil measurement LMS

Performance features

- Universal and efficient measuring device for production lines, workshops and instrument rooms
- Calculation and analysis of straightness, parallelism and cylindricity of all standard form sizes
- Tolerance specification option and monitoring
- CNC-capable programming
- Automatic storage of measurements
- Extensive range of accessories



Effective, precise and easy practicable profil measuring!

In developing its LMS profile meter, ess Mikromechanik GmbH has raised the benchmark for precise and rapid surface testing.

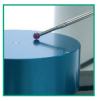
ess Mikromechanik GmbH boasts a tradition of outstanding achievement. One such achievement is the guide of the air-lubricated carriage which is made of a special high-strength aluminum alloy which boasts excellent properties on lubrication failure thanks to its state-of-the-art surface coating.

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Technical data

Profiltester LMS 0404-150 LMS 0808-150 ess Mikromechanik GmbH Sensor inductive Sensor

Measuring length 150 mm

Measuring slide air bearing

Measuring speed 0 - 25 mm/s

Power supply 100 V – 240 Volt, 50 – 60 Hz, 120 VA

Working temperature +10°C till +40°C, relative air humidity max. 80 %

Stock temperature -10 till +50°C

Profiltester



Basic Unit

Straightness accuracy

Measuring speed

Sensor

Tesa

Z-Column

LMS 0404-150

0,1 μm/100 mm 0,15 μm/travel range

0-25 mm/s

Inductive

GT 21

VMS 003

motorized not measuring measuring

LMS 0808-150

0,1 μ m/100 mm 0,15 μ m/travel range

 $0 - 25 \, \text{mm/s}$

Inductive

GT 21

VMS 003

motorized not measuring measuring

The guide accuracy of the air-lubricated carriage has also been streamlined using a new type of technology exclusive to ess Mikromechanik GmbH and, depending on the length selected for measuring, works out at less than 0,1 µm relative to the measured section.

One particularly subtle feat of engineering is the bearing assembly for the guide. Its development was based strictly on the principle of avoiding inaccuracies due to variations in compression, tension and temperature,

and the result is an assembly of phenomenal strength and rigidity.

Based on the infinitesimally proven air bearing technology applied by ess Mikromechanik GmbH, this profile meter is ideally suited to rapid and accurate diagnosis of a wide and diverse range of surface textures.

The instrument is suitable for motorized or hand-held use and has been developed according to the "plug and test" principle, and the Profilscan analysis software is a particular highlight.

Tailored to the requirements of the market, this software enables precise and consistent part measurements to be repeated within a few minutes without any particularly in-depth knowledge.

In addition to the various facilities for analyzing straightness, parallelism and tapering, it is also possible to generate a fully automatic program sequence using a CNC generator.

Effective, precise and easy practicable profil measuring!