

MEASURE ANGLES EASILY AND FASTER

# KEMES ANGLE METER®



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## THE PRECISION SOLUTION FOR EFFICIENT ANGULAR MEASUREMENT

KeMes stands for a completely new method of angle measurement and was primarily designed for users of press brakes to allow angle deviations to be directly detected during the production process. The measurement is performed by laser and guarantees high productivity and saves time. Compared to conventional measurement methods, the production process does not need to be interrupted. KeMes enables consistent quality assurance without wasting time, thus significantly reducing scrap.



*Easy, manual measurement by hand*

### EASY – USER-FRIENDLY

With KeMes, angles can be measured with just the push of a button. The intuitive user interface saves time spent on training. The measurement result is displayed in angular degrees on a high-contrast OLED display. Two different measurement modes allow both manual measurement by hand as well as automatic measurement directly at the machine.



## FASTER – MEASURE WITHOUT LOSING TIME

To automatically measure directly in the series production process, KeMes is simply and quickly fastened to the upper die of the press brake with a built-in permanent magnet. No time is lost on random inspections and calibration work. Fully tested quality is guaranteed; users can react immediately to any deviations. Even angles on large, bulky work pieces can be measured directly on the bending machine without additional manipulation of the work piece.

## MEASURE ANGLES – MAXIMUM QUALITY AND PRECISION

KeMes is based on an innovative, safe laser technology of laser class 2. The measurement is contactless, wear-free and gentle on the work piece. Only a narrow gap between the upper dies of the press brake is needed. This can easily be created by appropriately arranging the dies. The patented KeMes solution functions for various machine types and manufacturers. The measurement cycle is controlled by the integrated sensors. No intervention in the machine control is necessary. Therefore existing machines can be upgraded with KeMes at any time.

## DATA LOGGING – QUALITY ASSURANCE AND PROCESS OPTIMIZATION

The data logging function supports the user with regard to quality assurance and process optimization. Up to 30,000 measurement values can be stored in a CSV file and transferred for further processing via USB interface.

## TECHNICAL DATA KEMES A100

### Measurement

- Patented laser measurement principle
- Measurement range: 30-150°
- Measuring accuracy:  $\pm 0.2^\circ$  \*
- Repeatability:  $0.1^\circ$
- Resolution:  $0.1^\circ$

\*) See "Reference measurement accuracy" in the operating instructions

### Laser

- Laser beam diameter: 3 mm (at the exit point)
- Beam divergence: 35 mrad
- Pulse frequency: 167 Hz
- IEC 60825-1:2014, Table 10, Condition 1: 2000 mm (most restrictive location); 34  $\mu$ s (impulse duration in measuring aperture)
- IEC 60825-1:2014, Table 10, Condition 3: 445 mm (most restrictive location); 38  $\mu$ s (impulse duration in measuring aperture)

### Display

- High-contrast OLED display
- Measurement values in degrees resp. arc minutes

### Power supply

- Battery type: lithium-ion-polymer
- Charging time: approx. 2 h
- Charging: via USB High Power
- Operating duration: typ. 2000 measurements

### Housing

- W x H x D: 162 x 48.5 x 15.3 mm
- Protection rating: IP20
- Material: zinc / glass / plastic

### Certifications

- CE

### Environmental conditions

- Operating temperature: 5 to 40 °C
- Temperature during charging: 5 to 40 °C
- Storage temperature: -20 to 45 °C
- Rel. humidity: 5 to 95 % (non condensing)

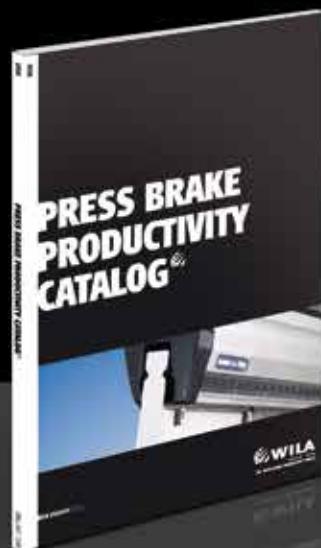
### Delivery contents

- KeMes angle meter
- USB charger incl. cable and country adapter
- Storage box
- Quick start guide
- Measurement aid incl. centering adapter



## **WILA. THE PRESS BRAKE PRODUCTIVITY PEOPLE.**

WILA is totally focused on providing a line of products and support systems to maximize the productivity of your press brakes. For over 80 years, WILA has specialized in Clamping Systems, Crowning Systems and Tooling and Accessories to reduce set-up time and improve accuracy of the press brake. Through strong partnerships with the world's leading press brake manufacturers, an extensive and trained dealer network, long experienced regional managers, dedicated application support and engineering staff, WILA is always close at hand to support your needs.



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### **PRESS BRAKE PRODUCTIVITY CATALOG**

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