



## Measuring angles – easily and faster

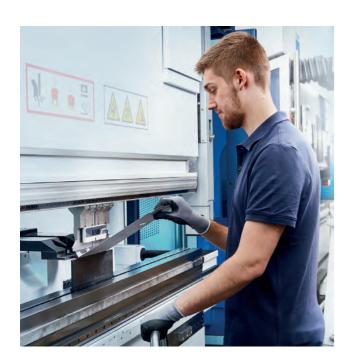
For producing sheet metal parts, the German agricultural machinery manufacturer RAUCH relies on the automatic angle measurement device from the Austrian industrial automation expert KEBA and greatly values the flexibility of the system.



An innovative company relying on an innovative solution

## Optimized angle control reduces processing time

Angle control is critical in the sheet metal bending process. The tolerance limit for angular deviations is very low, especially when the subsequent manufacturing steps are almost entirely automated. But such deviations are inevitable, particularly in series production.



Factors such as variations in the sheet metal thickness, rolling direction or quality of the bending tools can negatively affect the angle result.

To enable the immediate detection of angular deviations during the production process, sheet metal processing companies typically work with automatic measuring devices that are integrated in the press brake. These systems are usually very expensive and can only be used on machines from the specific manufacturer. They cannot be transferred from one press brake to another. Another disadvantage: The control and intervention process of an integrated angle measuring system tends to extend the duration of the sheet metal bending process.

If there is no integrated measuring system, then manual spot checks are done using analog or digital protractors. Using these instruments is very time-consuming since they have to be correctly positioned, which requires specialist expertise.

## The KeMes protractor from KEBA is greatly appreciated by renowned agricultural engineering company RAUCH



#### Save time in quality control

To save valuable process time, the agricultural machinery manufacturer RAUCH has recently started using a new measuring device for sheet metal processing - the KeMes angle measurement device from automation specialist KEBA.

#### Easy-to-use

This compact measuring device is based on innovative measuring technology and offers simple installation via magnets so that it can be used on almost any sheet metal bending machine, regardless of the manufacturer. When attached directly to the upper tool, the device uses a laser to measure the angle of each bent section automatically and without interrupting the production process.

This user-friendly device can also be used to check angles manually. In contrast to other handheld measuring devices, it offers one clear advantage: Thanks to a sophisticated measuring method, the angle measuring instrument or other measuring tools do not have to be positioned on the workpiece any more, which saves a considerable amount of time.

2 KEBA SUCCESS STORY KEBA 3

This renowned manufacturer of agricultural machinery,

fertilizer technology and municipal engineering equipment

has been using the KeMes angle measurement device for

several months now and is extremely enthusiastic about

ment device gives us consistent quality control during the

### Martin Herrmann, shift supervisor for mechanical processing

## Improved safety for the inspection of sheet metal parts

The new angle measurement device has also improved quality control at RAUCH.

When manufacturing critical components, every single part needs to be accurately checked to ensure that only good parts are further processed. With KeMes on the machine, we now have more certainty for this 100% inspection, which also gives us a stable series production process," says Martin Herrmann.

## 'Precision is our passion'

RAUCH is now using two KEBA angle measuring instruments in production: "We have successfully integrated the new measuring instruments into our production processes. One of the devices is a permanent part of the equipment for our automatic bending cell. The second device is used on our conventional press brakes - primarily in the production of parts that need to be combined in a reliable manner for further processing"

In the manufacture of RAUCH high-tech products, quality assurance is especially important, and an angle measurement system you can depend on is essential - in keeping with the RAUCH slogan of "Precision is our passion."

#### **RAUCH** – agricultural machinery Ergonomic advantages with manufacturer 'blind measurements'

The family-run company RAUCH is a global manufacturer The laser measuring device also provides an extra advantage of agricultural and municipal technology which has always for colleagues who work with the automatic bending cell and relied on innovation. 400 national and international patents who must also manually check parts bent by the robot for and patent applications, as well as numerous awards, speak quality assurance. Here, the operating principle of the new for themselves. angle measuring instrument provides employees with a great ergonomic advantage. Martin Herrmann comments: "My col-Contactless measurement leagues are now able to stand more freely when measuring

the large, sometimes very heavy, parts manufactured on the robot. Previously they often had to stand under the suspended load when checking the angles, with poor visibility of the area to be measured. With KeMes, you can simply take a 'blind measurement' and the angle appears on the display."

cessing plays a central role, since bending or forming is usually one of the first manufacturing steps for machines with working widths of up to 36 meters. Maintaining angular dimensions is especially important with regard to the subse-

the results. "From the very beginning I was impressed with For agricultural machinery manufacturers, sheet metal prothe measuring technology used in this device, which allows contactless measurement for increased flexibility. Our employees no longer have to set the sheet metal part aside for angle checking. You can already see whether the angle is correct during bending or directly in the upward stroke quent steps. of the machine," says Martin Herrmann, shift supervisor for mechanical processing at RAUCH. "The angle measure-

Thanks to quick and easy magnet mounting on the upper tool, the angle measurement device can be used on any press brake

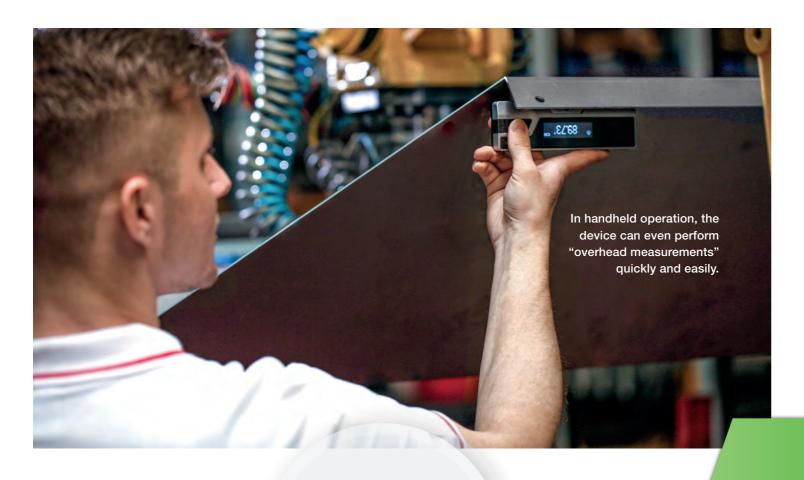
production process."





At the agricultural machinery manufacturer RAUCH, the KeMes angle measurement device is also used to check angles by hand. Especially in the robot bending cell, the new protractor made the process of manual follow-up inspection much faster and easier.

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#### **KEBA AG**



Founded in 1968, **KEBA AG** is an internationally successful company based in **Linz**, Austria, with **subsidiaries across the globe**.

In line with the credo "Automation by Innovation", KEBA has been developing and producing high-quality automation solutions for industrial, banking and logistics automation as well as energy automation for 50 years.

In the last fiscal year (April 2018 – March 2019), KEBA generated € 304 million in turnover across the Group.

The company employs approximately 1,750 people around the world.

RAUCH – improved quality control by using KeMes

Automatic angle checking is particularly useful for
parts that need to be combined
in a reliable manner for
further processing.\*

The angle measurement instrument allows us to ensure consistent quality throughout the production process.\*

I am very impressed with the device. It is innovative and can be used on any machine, regardless of the manufacturer.\*

\*Martin Herrmann, shift supervisor for mechanical processing





RAUCH Landmaschinenfabrik GmbH



A family company, RAUCH was founded in 1921 and is now a global manufacturer of agricultural and municipal machinery. It is headquartered in Sinzheim near Baden-Baden, Germany.

RAUCH develops and builds high-quality machines for fertilizer application and spreader technology for municipal winter maintenance. RAUCH is also an original equipment manufacturer for seed technology components.

In 2018 fiscal year, the company achieved € 75 million in turnover with 370 employees. The export share is 65 percent.

6 KEBA SUCCESS STORY KEBA 7

# Fit for the future with KEBA.

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In line with its credo, "Automation by innovation", KEBA has been developing and producing inventive, top-quality automation solutions for 50 years for industrial, banking, services and energy automation branches Indeed, as a result of competence, experience and courage, KEBA is the technology and innovation leader in its market segments. Extensive development and production expertise represents a guarantee for the highest quality.

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