EMAG Zerbst Maschinenfabrik GmbH

www.emag-zerbst.de

EMAG Zerbst Maschinenfabrik GmbH is specialized in the conception, development and production of parts and components for mechanical engineering. The business manufactures complex assemblies as well as customized single parts and special solutions. The company offers laser cutting, bending, welding, powder coating and assembly for this. It also has its own development and construction department.

INDUSTRY
Sheet metal processing & assembly

NUMBER OF EMPLOYEES
20

SITE
Zerbst/Anhalt (Germany)

Challenges

At Zerbst, the most varied of assemblies run through the production in lot sizes with perfect timing. The first bending operation must be correct, as only the required quantities are produced. Joachim Gerland, CEO of EMAG Zerbst Maschinenfabrik GmbH, explains, "If a cut part is bent incorrectly in the bending machine, we have to reproduce it promptly and quickly in an additional process. It starts to cost us financially if our staff do not discover until the part reaches the subsequent welding workstation that an angle is incorrect or a part has been bent in the wrong direction, for example."

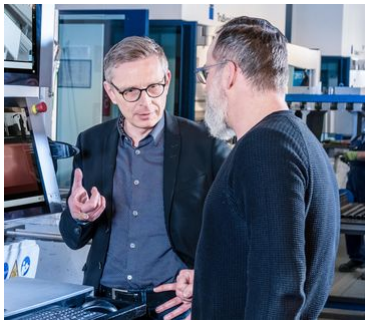
"Our customers have extremely high expectations in terms of quality for the very demanding food product market – and that can only be achieved with the laser. Errors have decreased significantly."

JOACHIM GERLAND
CEO OF SHEET METAL PROCESSING & ASSEMBLY ZERBST GMBH

Solutions

Zerbst ordered the TruBend 5170 three times, one machine with the additional feature Part Indicator. The Part Indicator consists of a camera in front of and a camera behind the press beam. Once the operator inserts a part, the cameras record the insertion position. Both images are joined to form an overall image in real time and are displayed on an additional screen via machine control. The operator sees the actual and target insertion positions, detects any deviation and can correct it accordingly. Gerland says, "With the variety of parts that our employees manufacture every day, this is an additional check that ensures safety. The camera is also useful for differentiating between left and right. There is always the risk that staff insert parts the wrong way round when the parts are almost symmetrical. The

Part Indicator detects that." The new feature has reduced the error rate significantly. Even though new employees are often put to work here.



Implementation

The company equipped all three TruBend 5170 machines with bending aids and the angle sensor ACB. That made the work much easier for the operators. The intuitive control as well as the 3D visualization of the TechZone Bend programming software are also a great support. Gerland says, "Our staff no longer have to consider how to create a 3D part out of a 2D part. They see it on the screen within just a few seconds."

Forecast

It is not easy to find good bending operators when there is such a shortage of skilled specialists. And even when you do find them, personnel still need a training period. Gerland states, "We can't change this problem in the medium term. But simplifying machine operation is a good approach, as is making the machines safer with assistance systems. The Part Indicator increases the chances significantly for us to train even beginners in a relatively complicated technology faster in future, making their work productive more quickly."