

Press Release

Leutenbach, February 2025

Always Correctly and Precisely Positioned: Metallux Sensors in BST Web Guiding Systems

The company BST GmbH manufactures web guiding systems, inspection, and quality assurance systems for web-processing industries. For its actuators, the company relies on contactless linear sensors from Metallux AG.

BST GmbH, headquartered in Bielefeld, is a medium-sized manufacturer of systems for web-processing industries. Founded in 1979, the company employs over 300 people and operates at 11 locations worldwide as part of elexis AG.

Web guiding systems are required wherever flat material webs are produced, processed, or refined. A typical application is the printing industry for paper, packaging, and labels. However, they are also indispensable in the production of battery cells, printed electronics, tires, hygiene products, as well as in conveyor and transport systems.

When a paper web runs through a printing machine, it is guided through numerous rollers. To achieve a perfect final result, the position of the web in the printing machine must be precisely defined and maintained at all times. A web guiding system ensures the exact alignment of the web and keeps the material on track, even at the highest web speeds, so that it is always correctly positioned.

Nicol Otterbach, Vice President of Global Marketing at BST, emphasizes that web guiding is an essential component of the continuous printing process. BST places great value on comprehensive customer consultation and high reliability, combined with simple and intuitive operation of the respective solution. BST also enables comprehensive process optimizations through the use of inspection and quality assurance systems. Excellent service worldwide completes the package.

An essential component of these web guiding systems is the MMP linear sensor from Metallux. The sensor is integrated into the actuator of the web guiding system. Its task is to continuously detect the absolute actual position of the drive, thereby enabling highly precise web control.

The absolute, wear-free sensor is hermetically sealed and, with a height of less than 2 mm, particularly thin. It works contactless via a magnet guided at a distance from the sensor. The MMP operates in the low voltage range, typically powered by 5 VDC. Its output signal can be processed by all common control systems.

The MMP not only offers high resolution, precision, and measurement accuracy but is also robust, wear-free, and has an exceptionally long service life of up to 50 million cycles. These advantages make it the ideal sensor for high-performance, fast machines, ensuring precise and reliable control.

However, BST does not use a standard version but a customized solution. The sensor is not mounted on a film with adhesive lamination as usual but is directly integrated into the actuator's design. This special form of construction enables easy installation. The dimensions and cable are also customized. Instead of polyester, the resistor carrier is made of FR4. These customer-specific adaptations meet BST's high requirements.

Metallux not only offers a comprehensive standard range but also focuses on consultation and the development of tailored solutions.

Production at Metallux takes place exclusively in Germany, ranging from prototype quantities to mass production of several hundred thousand units. Modern, automated production processes are employed, including cleanroom facilities and high-quality testing and inspection capabilities.

For over 10 years, Metallux has been supplying BST. Ingo Ellerbrock, Product Manager at BST, praises the quality of the product and customer orientation: "Metallux's ability to understand our complex technical requirements and translate them into reliable products, while communicating clearly and effectively with our team, has significantly contributed to the success of our products. I look forward to our continued collaboration."

Thus, not only the material web controlled by BST remains precisely positioned, but Metallux is also always correctly and precisely positioned

For more information:

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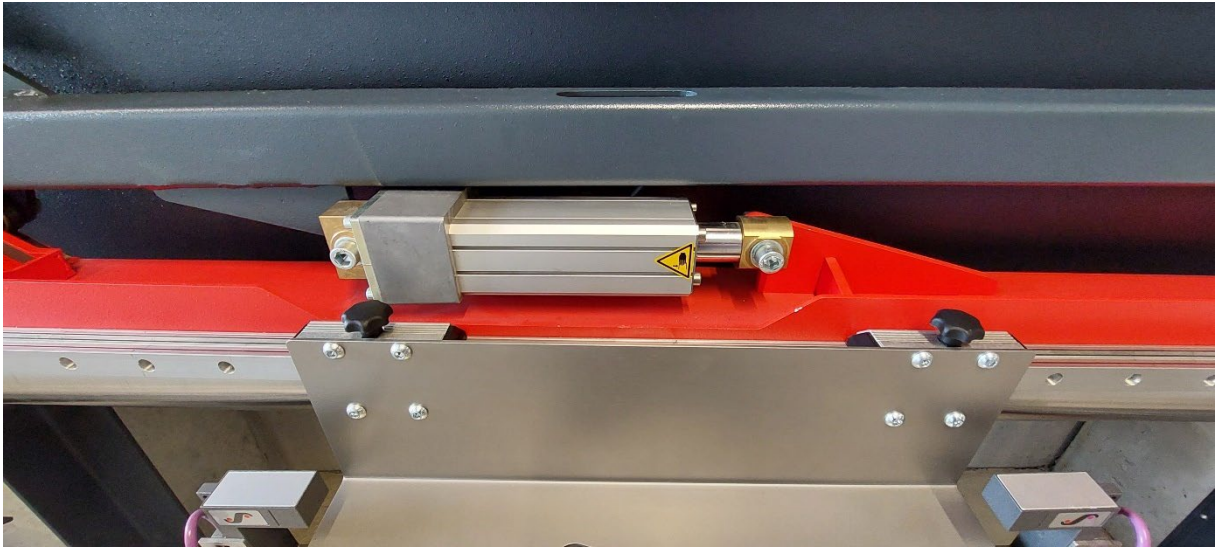
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Pictures:



Demo of a web guiding system in the BST showroom in Bielefeld



Actuator of a web guiding system with sensor inside



Installation of the sensor in the actuator



Nicol Otterbach (BST), Ingo Ellerbrock (BST), and Bernd Rath (Metallux) in conversation (from right to left)



Metallux sensors in assembly at BST



Standard Membrane Sensor MMP from Metallux

Profile Metallux AG

Metallux AG is an internationally active, leading developer and manufacturer of sensors in thick-film technology. The extensive product portfolio ranges from pressure, linear and rotary sensors to resistors and industrial joysticks for controlling vehicles and machines. Innovative products and customised solutions - Made in Germany: this is a combination that renowned customers from the fields of vehicle construction, medical technology, energy and environmental technology, materials handling and lifting technology and mechanical engineering have relied on for over 35 years.

