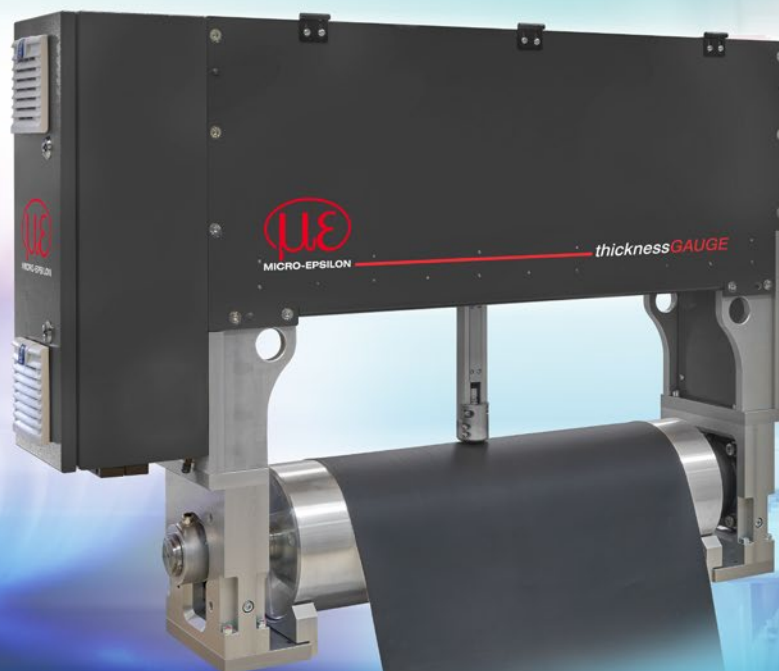
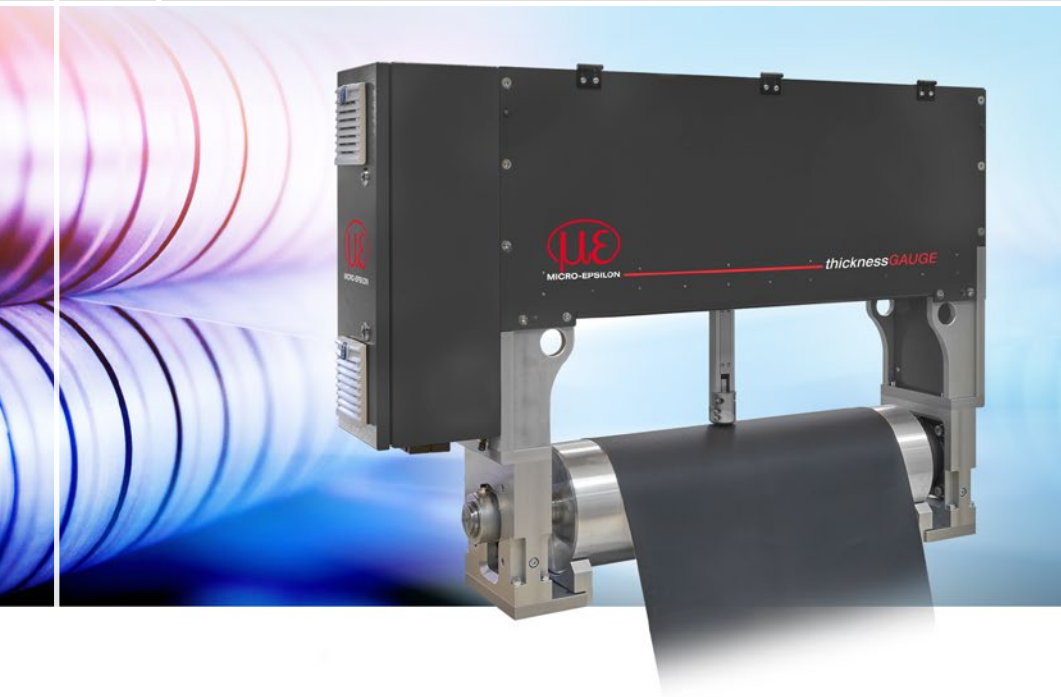




More Precision

thicknessGAUGE O.EC // Sensor system for inline film thickness measurement

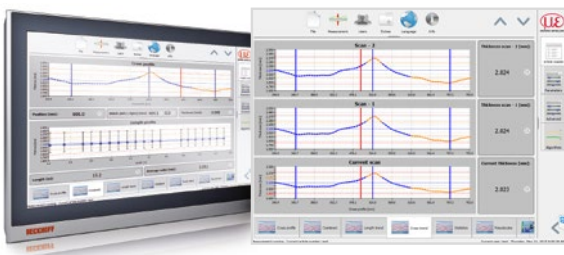




- Compact complete solution for precise inline thickness measurements
- Different material widths up to 1,250 mm
- Highest precision with favorable price/performance ratio
- Traversing measurement or fixed track measurement
- 24 V supply for the entire system
- Comprehensive software package for data acquisition, signal processing and automation
- Suitable for OEMs

The new class for inline thickness measurements

The thicknessGAUGE O.EC is a compact inline measuring system that is used for precise thickness measurements of plastic films and plates with a material thickness up to 3 mm. This compact system, which consists of a sturdy base frame, an integrated control cabinet and a measuring roller, works on the basis of the combiSENSOR KSS6430. It detects the thickness of the measuring object according to the functional principle explained on the right. It is matched to the measuring roller in the manufacturing process in order to offer the highest precision even in this equipment class. thicknessGAUGE O.EC can generate both a transverse profile of the material thickness in traversing mode, and a longitudinal profile at any width position. The measurement data is displayed on the touch panel IPC included in the scope of supply. Via the optional network or fieldbus interface, thicknessGAUGE O.EC can be coupled with the production line to automate the measuring operation.



Powerful software included

- Visualization of measurement results in numerical form and adjustable display of cross profile and longitudinal profile for ease of use
- Display of either imperial or metric units
- Flexible interface for control signals and process data for production line, especially for length/speed signal (=encoder signal)
- Preconfigured for teleservice via VPN connection
- Integrated, full automatic test of equipment capability
- Based on Windows 10

Scope of supply

- Measurement frame with measurement roller and integrated control cabinet
- combiSENSOR KSS6430
- Sensors and actuators for full automatic, traversing measurement
- External industrial PC with touchscreen
- thicknessCONTROL software package for signal processing and control

Functional principle

The thicknessGAUGE O.EC models are based on the combiSENSOR KSS6430. It combines a capacitive sensor with an eddy current-based inductive sensor. Both sensors measure the corresponding distance to the aluminum roller from the same side. The capacitive sensor uses the dielectric constant of the non-conductive material to determine the distance to the topside of the target. Before measurement, calibration must be performed on a reference target of known thickness.

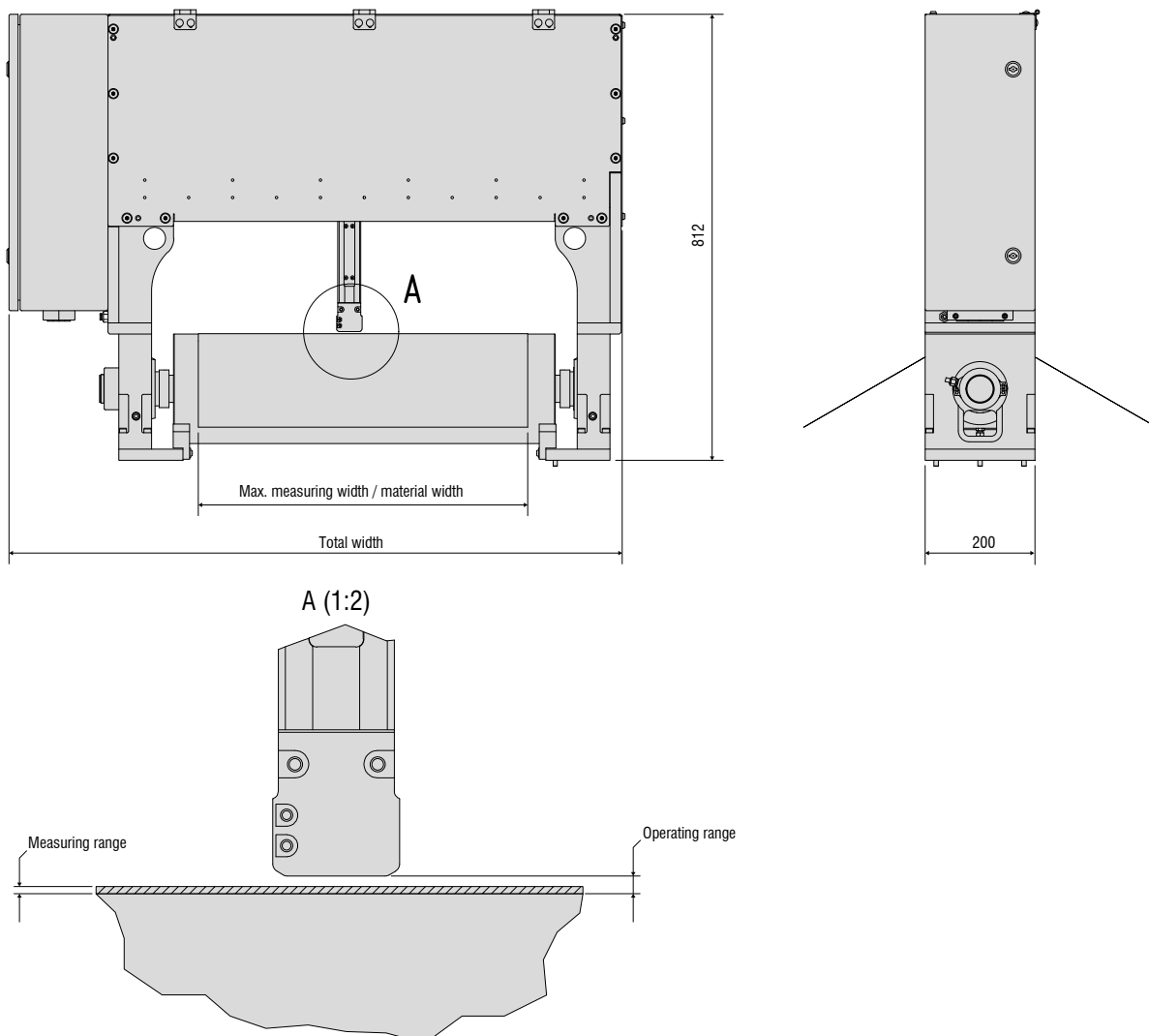


Available options

- Selectable cable lengths
- Customized axis length
- Encoder
- Interface for fieldbus connection
- Digital inputs/outputs
- Start/stop function as button on the machine

Model	O.EC-5/500	O.EC-5/750	O.EC-5/1000	O.EC-5/1250
Article no.	4350123.10	4350123.11	4350123.12	4350123.13
Max. measuring width	500 mm	750 mm	1000 mm	1250 mm
Total width	1017 mm	1267 mm	1517 mm	1767 mm
Operating range	4.5 mm			
Measuring range	3 mm			
Accuracy ¹⁾	$\pm 0.3 \mu\text{m}$			
Resolution	dynamic			
	0.0015 % FSO			
	0.045 μm			
Measuring rate	3.9 kHz			
Max. traversing speed	15 m/min			
Calibration	automatic			
Connection	electrical	24 V		
	pneumatic	5 bar		
Weight	approx. 136 kg	approx. 154 kg	approx. 171 kg	approx. 188 kg
Power supply	24 V			
Ambient temperature	+5 ... +45 °C			

¹⁾ 2 sigma, $\epsilon_r = 1$



Industrial PC with touchscreen

