Press release
New Millmate Thickness Gauge from ABB introduces gapless thickness measurement for aluminium strip

The new maintenance-free gauging technology depends only on strip thickness, being unaffected by coolant, dirt, steam, air temperature and alloy variations

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ABB’s Measurement & Analytics business announces the new MTG Box Gauge for gapless thickness measurements of aluminium strip produced in rolling mills and continuous casters. Based on pulsed eddy current technology, the new sensor accurately measures true strip thickness from below. It’s independent of such environmental variables as coolant, dirt, steam and air temperature. Since the gauge is also independent of material variations, the gauge avoids need for aluminium alloy compensation and calibration.

The MTG Box Gauge presents the invention of gapless gauging, with nothing above the pass line that can obstruct the strip. Installed below the mill table, it offers the best protection during threading, tail out and strip breaks. Being independent of environmental conditions, the gauge can be located closer to the rollgap than conventional gauges—even interstand—without concern for mill coolant. Since it can be placed at the heart of the process, aluminium rolling mills can achieve faster feedback and new levels of thickness control.

The gauge’s aluminium-bronze housing has superior mechanical and chemical properties, providing robust protection in harsh mill conditions. Mounted on a vertically moving frame, the gauge automatically maintains the position for optimal thickness measurement. Its hydraulic positioning system allows it to begin measuring instantaneously with strip tension.

The control unit communicates with the gauge, including measurement data, state control, and error handling as well as implementing vertical position control. Additionally it integrates the gauge with other control mill systems, providing a choice of:

- Profibus-DP fieldbus communication
- Network communication via VIP, OPC DA and Modbus TCP, and
- Discrete I/O-signals

The control unit comes in either wall or floor mounting cabinets.

-More-
Operators can view and control all system functions via an industrial PC, with either a panel-mounted touchscreen or standard office monitor. The main functions supplied by application software include operation, diagnostics, service and settings. The user friendly HMI offers such capabilities as unit handling, different user access levels and selectable languages.

By switching to the MTG Box Gauge from X-ray or isotope gauges, aluminum rolling mills can avoid health, safety and environmental concerns.

ABB's Measurement & Analytics business unit (www.abb.com/measurement) is among the world's leading manufacturers and suppliers of instrumentation and analyzers. With thousands of experts around the world and high-performance technology, ABB's team is dedicated to making measurement easy for its customers.

ABB (www.abb.com) is a leading global technology company in power and automation that enables utility, industry and transport & infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 135,000 people.

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