



Contribution ID: 62

Type: Oral Presentation

Oiling of Steel Strip: A New, Intelligent Oiling Machine Combines Electrostatic Oiling With High-Precision Oil Film Measurement, Ensuring Higher Process Security and Lower Oil Consumption

Tuesday 7 October 2025 12:10 (20 minutes)

The newly developed combination of oiling machine, smoothing roller and online oilfilm measurement system ensures uniform oil application on metal strips while minimizing oil consumption. Integrated with an inline oil film measurement system, it promptly detects oiling issues like overoiling or dry stripes, allowing operators to take immediate action. A key innovation is the smoothing roller, which applies consistent pressure across the entire strip width, ensuring uniform oil distribution. This roller compensates for force variations, maintaining pressure accuracy within just a few percent across the strip width. The data integration enhances material efficiency and product quality. The machine's reduced oil usage supports sustainable production of CO₂-neutral steel coils. Its compact, modular design enables easy integration into existing production lines and adaptability to future needs, providing plant operators the flexibility to continuously optimize processes without significant capital investment.

Primary authors: MARESCH, Cedric (Limax GmbH); FIEWEGER, Martin (AMEPA GmbH)

Presenter: FIEWEGER, Martin (AMEPA GmbH)

Session Classification: Surface Technologies

Track Classification: Surface technologies