



## UNLOCKING THE BLACK BOX FROM THE MOLD EXIT

The wtl Series leverages advanced dual-sensor self-calibration technology, delivering micrometer-level precision and accuracy in continuous casting processes for width, thickness, and length measurements

## **DURABLE IN DEMANDING ENVINROMENTS**

Specifically designed for the rigors of continuous casting, the wtl Series ensures reliable performance in extreme industrial settings, withstanding high heat and dust

## **SEAMLESS INTEGRATION**

Comprehensive software capabilities allow for the seamless integration of the WTL Series into existing production systems, enhancing process control and data-driven decision-makings

#### **ADAPTABLE SYSTEM DESIGN**

The modular configuration of the WTL Series is ideal for continuous casting applications, offering the flexibility to adapt to different production requirements and system evolutions

#### **REAL-TIME DATA AND SMART MONITORING**

Equipped with advanced monitoring features, the wtl Series provides immediate feedback on process conditions, facilitating prompt adjustments and continuous improvement

## **MINIMAL MAINTENANCE NEEDS**

The wtl Series is engineered for low maintenance, ensuring long-term reliability and consistent performance in continuous casting operations

# **Technical Data**

Offering advanced solutions with two-sensor self-calibration, wtl Series achieves micrometer precision and accuracy in measurements of width, thickness and length.

Amount of Sensors to Operate	2 up to 16
Temperature Independent Measurement	Hot or Cold <sup>1</sup> dimension
Pyrometer Integration	Integration of standard wtl third party Pyrometer <sup>1</sup>
Trigger Modes for Measurement	non triggered
PLC Interface	Modbus TCP/IP
Alternative Communication Interface <sup>2</sup>	MQTT³ with QoS 2, REST⁴ or a raw TCP/IP⁵
Additional Communication Capabilities <sup>2</sup>	Receive information for a measurement e.g. reference values, trigger signals, material identification and more
Monitoring Interface <sup>6</sup>	WebSockets or MQTT <sup>3</sup> with QoS 2
Monitoring Capabilities <sup>6</sup>	Internal information of Sensors and Processing Unit, their Metadata and measurement related information
Interface Encryption	Transport Layer Security (TLS), additional RFC 7519 Industry Standard <sup>7</sup>
Web Configuration Dashboard	Embedded Web Application for observing and calibrating the Solution
Browser Compatibility	Chrome/Edge <sup>8</sup>
Sensor Housing Material Options	Aluminum alloy or Stainless Steel
Process Unit Delivery	Switch cabinet or protected housing <sup>9</sup>
Protection	IP20 (switch cabinet), IP68 (protected housing), IP68/IP69K (radar sensor unit)
Certification of radar sensors	CE, FCC
Power	230 VAC / 50 Hz or 110 VAC/ 60 Hz for U.S. Market available
Power Consumption	~500 Watt (with 16 Sensors)
Measurement Principle	FMCW-Radar

<sup>1</sup> Pyrometer integration is needed

<sup>2</sup> Alternative Communication interface (COM Module) is needed

<sup>3</sup> MQTT Broker is not included

<sup>4</sup> Customer side has to implement its own mechanisms to connect to