




Infraalytic GmbH

As an innovation leader and developer of IR oil film thickness sensors, we always offer you the latest technical developments in IR measurement technology with our sensors. Here we would like to introduce you to the latest In-line oil layer thickness sensor, the **NGO3**, compared to the previous model:

 <p>Innovationsführer und Entwickler in der Ölschichtdickensensorik Innovation leader and developer in oil layer thickness sensor</p>		
Technical specifications	Model NGO 2	Model NGO 3
Measurement method	Infrared spectroscopy	Infrared spectroscopy
Measured variables	Oil layer in g/m ²	Oil layer in g/m ² and mg/m ²
Distance to strip	120 mm	200 mm
Allowed strip height deviations	± 10 mm	± 20 mm
Mechanical dimensions	337 x 257 x 88 mm	519 x 264 x 100 mm
Weight	7,8 kg	8 kg
Ambient temperature range (without external cooling)	+5 °C up to +40 °C	+5 °C up to +55 °C
Measurement frequency	60 Hz	≤ 120 Hz
Measurement range	0,5 – 6 g/m ² (measurement from 0,05 g/m ² possible with special calibration)	Standard: 0,3 – 6 g/m ² , > 0,02 g/m ² possible with special calibration All metals and ceramics
Strip materials	<ul style="list-style-type: none"> • steel/cold strip, hot-dip galvanised, el-galvanised, phosphated, aluminised, ZnMg surfaces, galvanized • aluminium – uncoated, pretreated 	All metals and ceramics
Quantifiable coatings	Lubricants mineral oil, mineral oil thixotropic, Drylube (hotmelt)	All translucent organic substances
Repeatability (1 Sigma noise equivalent)	-	1 nm (1 mg/m ²)
Absolute accuracy	1 Sigma ± 10 % from measuring range end value in g/m ² up to minimum 2 g/m ² equates ± 0.2 mg/m ²	< 200 nm for group calibrations and < 30 nm for specialized calibrations
Window cleaning periode (depending on environment)	≤ 1 week	≤ 3 months

Electrical requirements	24 V, 1A + 5-9 V, 6A	24 V, 1A + 5-9 V, 6A
Data transfer	RS 422	RS 422 or Ethernet
Data format	Proprietary	Modbus
Air requirements (oil free)	3 - 8 bar, 100 l/hour	pressurized air 1-8 bar, 0 - 6.500 l / hour (depending on dirtiness of the environment) or blower 50 m ³ / hour
Protection class (electronics and technology)	-	IP65
Technical data from 01/2021	Model NGO 2	Model NGO 3
Signal- noise ratio improved by a factor of more than 5	-	●
Doubled measuring rate	-	●
Detection thermally compensated	-	●
Internal high-performance light guides, heavily compressed, gold-plated and polished	-	●
Radiation-optimized gold-plated high-performance reflectors	-	●
The spectrometer is thermally decoupled from the radiation sources	-	●
Significantly reduced soiling of the light exit glasses through optimized air flow	-	●
Significantly reduced soiling of the detector window due to the dead space in front	-	●
Intelligent time-saving calibration management	-	●
Modular construction	-	●
Simple assembly with coded positioning at the same time	-	●
Guarantee -10 years on the lamps from commissioning	-	●

Status: 01/2021