




InfraIylytic 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, galvannealed • 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) | ± 20 nm without smoothing (60Hz) ± 4 nm with smoothing | ± 5 nm without smoothing (120Hz) ± 0,8 nm with smoothing |
| 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 |

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| 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 | - | ● |

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