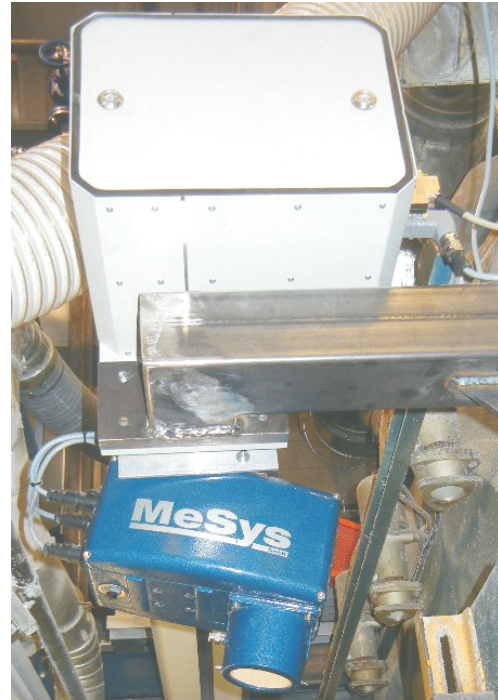


IR3000

IR 3000 On-line moisture and coating measurement

Near Infrared (NIR) Technology:

All molecular bonds absorb specific wavelengths of light. Hydrogen bonds including O-H (water); C-H (hydrocarbon) and N-H (ammonia) all absorb strongly in the NIR spectral region. The amount of NIR energy reflected at a given wavelength is inversely proportional to the quantity of absorbing molecules in a product. The NIR technique is a non-destructive, non-contacting measurement. Mesys's sensor utilizes multiple wavelengths of NIR light, projected onto the product at a very high repetition rate. The reflected light is then measured using a digitally enhanced detection system and thousands of data points are sampled every second.



Application: Adhesive Coating weight

Ideal applications:

Moisture on paper, film, non woven and textile

On-line weight measurement of coating (solvent or water based) on paper and aluminum

IR3000 Sensor specifications

Measured NIR Constituents: Moisture, oil, coating, etc.

Resolution: 0.1% to 0.05% (depends on material)

Accuracy: +/- 0.1%

Moisture Ranges: 0–90%

Optical Measurement Distance: 4–16 in (10–40 cm)

Sampling Size: Approximately 1.5-in (3.7 cm) diameter on sample

Calibration Codes: 50 Standard

Enclosure: Cast Aluminum, IP65 (NEMA 4), Stainless

Power: 80–260 VAC (50/60 HZ), 24 VDC

Operating Temperature: 0–130°F (0–55°C)

Vortec Cooling (High Temp): Max 170°F (85°C)

Stainless Steel IP67: Max 200°F (93°C)

IP, RS-422/485 (factory configured), Digital I/O (factory configured)

Optional interfaces: Profi bus, Profi net, DeviceNet, Ethernet IP

Calibration: Factory Pre-Calibrated

Routine re-calibration is not required

Ambient Light Sensitivity: None

Lamp and Motor (MTBF 20 years)



Application: moisture on paper