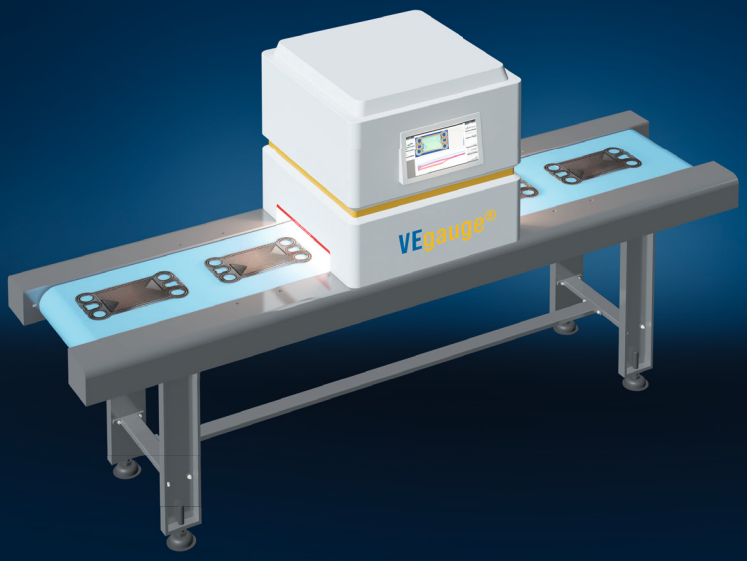
VEgauge® SERIES

PRODUCT OVERVIEW

COMPREHENDING THE INVISIBLE



Fast. Non-destructive. Comprehensive. VEgauge® features PVA's unique Hyperspectral Vision technology for continuous macroscopic or microscopic inline inspection. It efficiently captures surface properties, inspects thin films, and identifies deviations from production specifications.

PVA TePla

HYPERSPECTRAL VISION IN-LINE

WE DON´T GUESS.
WE SEE.

Most inspection methods are slow, complex, or destructive. The **VEgauge®** changes that:
100 % hyperspectral inspection inline, in near real-time, for industrial production.

Inline & continuous
Macro or micro inspection integrated straight into your running process.

Module or full system
Scalable to your line, sized to your sample and throughput.

Industrial production processes
Engineered for industrial production lines

Comprehensive analysis
100 % sample information in just one run.

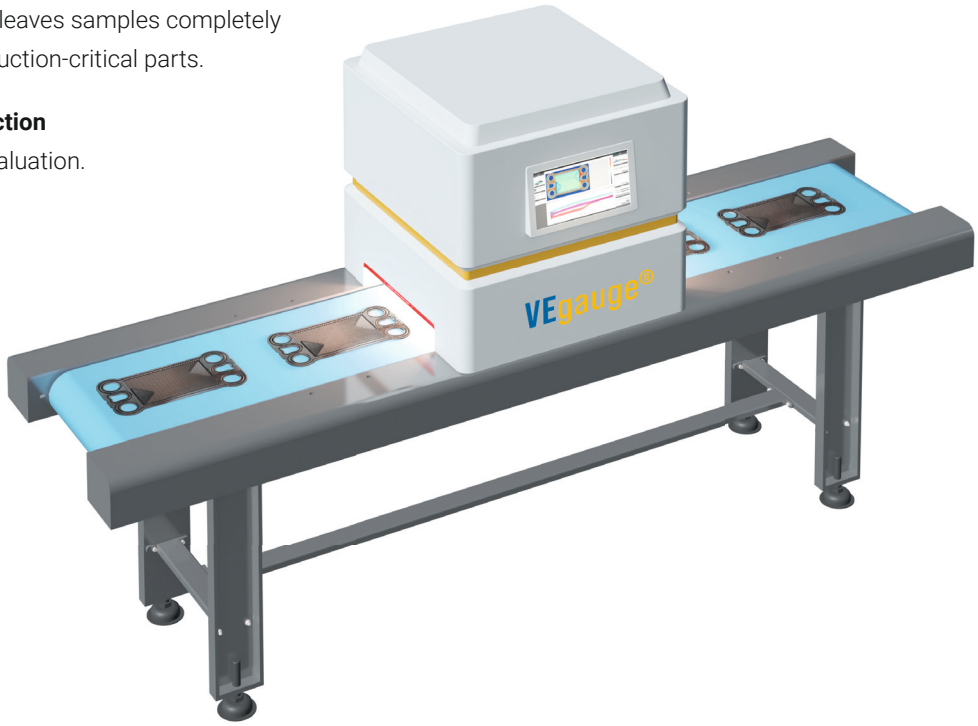
Fully non-destructive process
Optical spectroscopy leaves samples completely intact – ideal for production-critical parts.

Near real-time inspection
for acquisition and evaluation.

Layer thickness from 1 nm to 500 µm
Precisely inspects ultra-thin to thick layers across a wide range of materials and substrates.

Compatible with virtually any material
Metals, glass, polymers, semiconductors, ceramics – the VEgauge® handles them all.

Fully automated inspection with full-surface insight
From measurement to result — no complex setup, no prior expertise required.



TECHNICAL PARAMETERS

Every detail matters. The VEgauge® is engineered for precision, speed, and versatility.

SPECIFICATIONS	
Measurement Mode	Reflectance
Measurement Time	< 10 s (typical)
Wavelength Range	VNIR 400–1000 nm | SWIR 900–1700 nm
Spectral Resolution	VNIR 1.34 nm | SWIR 3.5 nm
Field of View (FOV)	from µm to m
Spatial Resolution	**MACRO** cm – m range | **MICRO** sub-µm – µm range
Sample Size	defined by customer requirements
Lighting	VEluminise® – adjustable halogen broadband source, LED broadband or UV-LED excitation
Software	VEsolve® PRO
Connectivity	RJ45 (Ethernet)
ENVIRONMENT	
Power Requirements	230 VAC (115 V optional), 50 Hz
System Dimensions	min. 530 x 532 x 525 mm (L × W × H) [1]
System Weight	min. 50 kg [2]
Certifications	CE, RoHS, UKCA
Operating Conditions	+5 °C to +40 °C (non-condensing)
SUBSTRATES & LAYERS	
Substrates	Metals, glass, polymers, semiconductors (Si, SiC and others), ceramics, and many more
Layers	Oxides, nitrides, carbides, polymers, and many more
Layer Thickness Range	1 nm – 500 µm (material dependent)
Surface Information	■ Cleanliness ■ Contaminations ■ Defects ■ Surface states ■ Custom target parameters

[1] Based on sample sizes and manufacturing process.

VISIT US.
ONLINE.



WANT TO FIND OUT MORE?
CONTACT US FOR INFORMATION!

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The technical data, illustrations, and descriptions contained in this document are non-binding. They are intended solely for general information purposes and do not constitute a legally binding offer. We reserve the right to make technical changes in the interest of progress, as well as the right to correct errors. The exclusively applicable specifications are those valid at the time of order placement.

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