



VEpioneer[®]

VEpioneer[®] is an unique combination of optical spectroscopy & imaging to objectively assess the entire (wafer) surface, in a fast non-invasive manner.

Contamination and deviations in production no longer have to be checked on a random basis or with time-consuming single-point measurements.

VEpioneer[®] improves manufacturing capacity by reducing reject rates during production through rapid full-field wafer inspection of a wide range of quality features in a variety of process steps.

Matched quality features

layer thickness, homogeneity, surface energy, contamination, geometry, chemical composition ... and more

Matched process steps

lithography, deposition processes, cleaning, etching, polishing, implanting, metallization ... and more





Surface

Layers and thin films



Defects







VEpioneer[®]

EFFICIENT SEMICONDUCTOR MANUFACTURING RESOURCE-SAVING PRODUCTION COST REDUCTION

VEpioneer®	Technical data sheet
Spatial resolution	293 µm
Software suite	VEsolve®
incl. AI and machine learning	\checkmark
incl. image corrections	\checkmark
Clean room capability	Q2/2024
Fast inspection	✓ (30 s)
200 mm wafer capabilities	\checkmark
300 mm wafer capabilities	\checkmark
including wafer frame	\checkmark
Connections	power (230 V), RJ45 (Ethernet)
System footprint	1000 x 500 mm
System height	350 mm
System weight	45 kg
Operating conditions	+5 +40 °C (non-condensing)

COMPREHENDING THE INVISIBLE!