



TREVISTA® SWIFT

Patented Surface Inspection for Parts in Motion

trevista® SWIFT: Low-Cost, Ready-to-Connect Compact Unit

SAC



trevista® SWIFT

- Easy integration
- Best price-performance ratio

High-Speed trevista® Surface Inspection

The trevista® sensor system is based on the patented shape-from-shading technology and is perfect for the inspection of technical and decorative surfaces in industrial environments.

Thanks to the integrated controller, trevista® SWIFT is particularly space-saving and can be easily integrated into existing production processes via the GigE interface. The compact unit is equipped with a 5MP high-speed camera (10GigE) as well as a branded lens and is ready for immediate use.

trevista® SWIFT – Your Benefits

- Reliable detection of bad parts based on the topographical information down to the μm range
- Minimized pseudo-reject rate
- Stable inspection at differing gloss levels
- Suppression of brightness fluctuations and gloss effects
- High part throughput – short amortization
- Capture up to 40 trevista® images per second at full resolution of 5MP
- Capture images of parts in linear motion and motion on circular path, e.g. glass turntable applications
- Best possible inclination range of the lighting
- Maximum brightness and maximum protection from extraneous light
- Full resolution without field limitation or speed reduction
- Easy and fast integration (concept based on matrix camera)
- Delivery with trevista® SDK on request
- Space-saving and compact thanks to the integrated lighting controller
- Fully implemented in Coake® from version 7.4.0

Shape from Shading: See what's really there.

Especially components with varying surface characteristics leave classic inspection methods with impossible tasks: Can a material defect on a lateral surface be reliably detected despite gloss and dirt?

Is the component defective or is it just subject to normal, process-related brightness fluctuations?

Patented **trevista®** Technology:

SAC's unique shape-from-shading process makes it possible to obtain information about the three-dimensional shape of an object from the shading of surfaces.

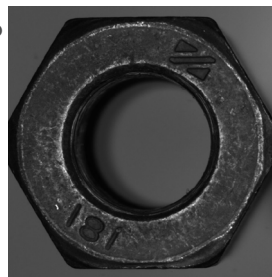
A special algorithm calculates high-quality result images from four input images in an instant, which makes reliable surface evaluation possible even with high part throughput.

Thanks to the versatile combination of **trevista®** result images, the inspection parts can be examined precisely and flexibly for a wide variety of fault characteristics.

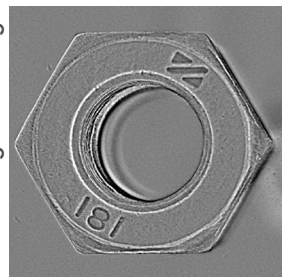
See what's really there.

The examples on the right show the clear added value of **trevista®** image material in contrast to conventional image-processing systems: Thanks to its 3D representation, the integration image provides topographic information that can be used to distinguish local elevations and depressions in fractions of a second. As a result, even demanding surfaces can be precisely evaluated.

Texture image

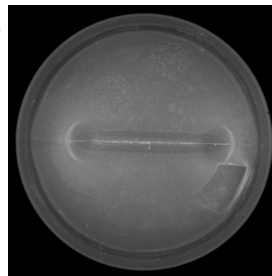


Integration image

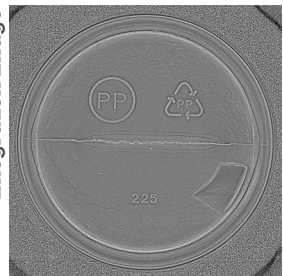


Example image acquisition hexagon nut: **trevista®** SWIFT provides reliable evaluation of the embossments via the integration image despite the shiny metal surface.

Texture image



Integration image



The embossed characters can be fully recognized and evaluated on the concavely curved metal surface via the integration image.

Conveyor belt or glass turntable (see picture): **trevista®** SWIFT delivers the best image material of components in motion.



You want to
know more
about **trevista®**
SWIFT?

Contact us.

We will gladly arrange
a product demo.

SAC

Your partner in machine vision technology since 1996: innovative products and custom solutions for industrial applications.



Machine Vision for Industry

With expertise, enthusiasm, and experience, we generate genuine competitive edge for our customers.

Our extensive consultancy, training, and support services ensure smooth, professional implementation of your project – from initial inquiry to comprehensive after-sales service.

Always close to the customer – always flexible.

SAC

Machine Vision for Industry

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