trevista® CAM

Advanced surface inspection: easy, quick and low-cost

Ideal for All Surface Types

trevista® CAM delivers inspection results in a quality that puts many other high-end solutions in the shade. Just unpack, start up, and inspect!

trevista® CAM combines the patented trevista® illumination system with a powerful smart camera plus versatile software, to form an all-in-one system that meets all your needs.

trevista® CAM – Your Benefits

- unique trevista® imaging included as standard: see what's really there!
- bad parts are reliably detected using topographic information down to µm detail
- false defects are minimized
- can suppress reflectance fluctuation and shine effects where required
- ready to use immediately with minimum engineering
- hardware is perfectly coordinated for optimum performance and imaging quality
- intuitive evaluation software with integrated command set for custom inspection programs
- standardized interfaces for communication with higher-level control system

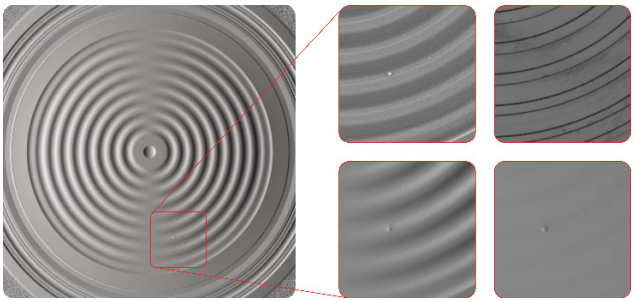
From reading codes on complex surfaces to inspecting curved surfaces and trim parts in detail – with trevista® CAM, you're always ideally prepared for any inspection scenario.

Shape from Shading: Seeing What's Really There!

Parts with curved surfaces or free-form geometries often present particularly insoluble challenges for conventional inspection methods. Is that shape deviation a material defect, or simply part of the geometry? Is that part actually faulty, or simply showing process-related reflectance fluctuation?

Based on SAC's 'Shape from Shading' technology, trevista® CAM supplies clear and correct answers every time. The unique process uses surface shading of an object to collect information on its three-dimensional form.

No more tricky and time-consuming searching to get the right lighting!
The object is lit by a domed structured illumination unit with multiple light sources. By taking multiple images, the algorithm calculates high-quality result images ultra-rapidly, so that even large numbers of parts can be inspected quickly and meticulously.



Defective section
trevista® result images for a membrane

Four Sharp Shots: Creating the Perfect Image
Our coin example demonstrates how trevista® CAM works: The slope images in x and y direction detect shape deviations in a specific orientation. The curvature image is invariant in orientation, and provides additional topographic information that can be used to distinguish between elevations and depressions.

The texture image evaluates the brightness characteristics of the surface, allowing defects such as discoloration and rust to be clearly identified. These partial images are combined to give the final result image.

Want to know more about trevista® CAM?

Contact us!
We will be happy to arrange a detailed product demo.

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