

READY TO USE FOR BETTER QUALITY

INVISIUM

VISION SYSTEM SOLUTION FOR SOLAR CELL INSPECTION



”A successful overall image processing solution consists of components that are high-quality and precisely coordinated to each other, paired with expertise and the corresponding knowledge of the boundary conditions.”

EASY, FAST AND COST-EFFECTIVE

Our vision system solution reliably and quickly inspects for quality and positioning of the individual solar cells and has faulty cells rejected before processing in the string.

Points of inspection include cell symmetry, number and size of the busbars, the number and size of the fingers, contour data and the printed circuit board of the cell. Each new inspection job can be trained and created in just two minutes thanks to the one-button teach concept.

The comprehensive inspection and precision measurement, synchronized with the highly accurate positioning of the individual cell by the robot arm on the stringer belt, ensures maximum efficiency of each cell. Thanks to our simple hand-eye calibration, this synchronization is almost automatic, and the robot finds its optimal alignment.

For your system, this means measurable added value for manufacturing high-end solar modules – for us, it means: Pure. Vision. Solutions.



FEATURES & BENEFITS:

- Ready to use
- Scalable and expandable vision system
- One-button teach concept
- Fast, automated clock cycles
- Fast, easy hand-eye calibration
- Modular software concept
- Personalizable user interface
- Common communication interfaces
- Backing up data and information about quality assurance
- Use of existing IPCs possible
- Lower total operating costs

HIGHEST PRECISION

- Accuracy of a position of a cell for the string*: ± 0.02 mm
- Dimensional accuracy can be inspected with a repetition accuracy* $< \pm 0.02$ mm
- Angle offset detection*: $\pm 0.01^\circ$

* Values are based on a resolution of 9 megapixels

The Invisium GmbH focuses on products for image processing as well as the consultation, project engineering and integration of automation solutions using image processing and industrial identification.

We ensure the quality of products manufactured in automated processes and provide for complete traceability during the individual process steps. We work with powerful systems and collaborate with you to determine the most effective and efficient solution.

Continuous further development of our products and services, constant awareness of quality and expert advice ensure that your processes deliver the highest quality.

PURE. VISION. SOLUTIONS.

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