Deflectometry for Specular Surfaces

Efficient 3D-Inspection
SpecGAGE3D – Specifications* 

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of view</td>
<td>230 x 170 mm² bis 300 x 200 mm²</td>
</tr>
<tr>
<td>LatRes</td>
<td>0,25 mm</td>
</tr>
<tr>
<td>Measurement speed</td>
<td>Data acquisition: down to 2 s (depends on object)</td>
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<tr>
<td></td>
<td>Data evaluation: &lt; 3 s</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Height: absolute error ± 3µ</td>
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<tr>
<td></td>
<td>(over 80 x 80 mm²)</td>
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<tr>
<td></td>
<td>Curvature: ± 10 mD (über 3 x 3 mm²)</td>
</tr>
<tr>
<td>Measuring principle</td>
<td>Phase measuring deflectometry (PMD)</td>
</tr>
<tr>
<td>Operating system</td>
<td>Windows 7 pro, 64 bit</td>
</tr>
<tr>
<td>Interfaces</td>
<td>DCOM, C++, dll</td>
</tr>
</tbody>
</table>

* Related to the SpecGAGE3D and SpecGAGE3D designs
100 % Quality Assurance on Production Lines

Local Precision Down to the Nanometer Range

- Fast, full-surface and high-precision measurement of specular and reflective surfaces
- Shape accuracy in the micrometer range
- Designed as an integrated in-line system or a compact stand-alone solution
- Manual or fully automated quality inspection
- Reliable and robust
- Vibration resistant
- Noncontact 3D measurement

Use in cleanroom

Headlights and reflectors

Easy integration into existing environments

Reliable inspection of specular, reflective and curved surfaces
Easy Test Procedure

SpecGAGE3D Tests Even Demanding Objects with the Utmost Reliability

- Easy operation
- Complex test procedures within a few seconds
- Software package for visualization, analysis, data export and target/actual comparison
- Individual software modifications possible
- Fast and precise data generation
- Evaluation of various parameters with just one scan: Incline and height data and contrast images

Rear-view mirrors

Optical elements

Head-up Displays

Fast data generation

Visualization, analysis and data export
Optimize Production Processes

Early Defect Detection Improves the Sales Potential

- Efficient, cost-effective and automated solution for reliable quality assurance of mirroring surfaces
- Optimized production processes and reduced costs thanks to early defect detection and prevention
- Long-lasting investment security
- Low operating costs
- Improved customer satisfaction thanks to minimized complaints

Clear reportings

Improved customer satisfaction

Early detection of defects and deviations

Higher sales potential
Welcome to the World of 3D Inspection!

The ISRA VISION AG / 3D-Shape GmbH is one of the world’s leading companies when it comes to challenging measuring tasks in 3D. 3D-Shape technology is applied wherever sophisticated and highly precise measurements are an important prerequisite for best production processes and reliable quality assurance: in the electronics and automotive industry, medical technology, toolmaking and form manufacturing as well as optical systems and many more industrial sectors.

Leading Technology – Always Close To The Customer

State-of-the-art hard- and software as well as high-quality components form the basis for highest precision and pace of the 3D-Shape systems. The direct connection to customers everywhere in the world guarantees a timely, customized solution and its implementation in new or existing production environments. As a part of ISRA VISION AG, 3D Shape offers comprehensive customer support via the global service and distribution network of the leading expert in the field of surface inspection.