**Description:**
- 2D and 3D investigation for roughness, profile and surface measurement.
- The laser microscope combines the examination functions of a surface/roughness measuring instrument with the advantages of a scanning electron microscope.
- The measuring process is always contactless, which means that the measuring object remains unchanged.
- Two different light sources available, a white light source (CCD camera) and a short-wave laser light source (violet).
- With the help of the violet laser, the surface of the sample is scanned.
- The optical image (CCD camera) is then projected onto the topography.
- In this way, the topographies can be displayed in real color.

**Technical Specifications:**

<table>
<thead>
<tr>
<th>Measuring principle:</th>
<th>Laser Scanning, confocal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light source</td>
<td>violet (408 nm) semiconductor laser</td>
</tr>
<tr>
<td>Vertical resolution</td>
<td>max. 1 nm</td>
</tr>
<tr>
<td>Lateral resolution</td>
<td>max. 260 nm</td>
</tr>
</tbody>
</table>

**Field of Application:**
- 3D roughness parameters according to DIN EN ISO 25178
- 2D roughness parameters for evaluation according to DIN EN ISO 4287 and procedure according to 4288 and VDA 2006
- Measurement of distances, depths, volumes and geometries
- Wear measurements, running track wear of a RSS on a shaft, etc.
- Damage analysis: scratches and flaws