A stent is a medical implant which is inserted into hollow organs to counteract or prevent disease-induced or localized restrictions in flow. In 2008, some 268,500 stents were implanted in Germany alone.

Stents come in many different shapes and sizes – to meet the needs of people of all ages (even toddlers!) and the original uses and properties of the various organs or vessels.

**Unwound 2D plane image of stent**

**Technical Data**
- Measuring Range: 76 mm
- Working Distance: 49 mm
- Resolution: 10 μm
- Depth of Field: 0.3 mm

**Camera Configuration**
- Camera: SK8160GKO-LB
- Sensor Length: 40.80 mm
- Number of Pixels: 8160
- Line Frequency: 0.05-7 kHz
- Interface: Gigabit Ethernet

**Line Scan Cameras with integrated bright field illumination**

Illumination and image acquisition techniques that are well adapted to the object properties emphasize the object features of interest. When using directed bright-field illumination, the beam is emitted in the same direction as the imaging camera. The light that is reflected back directly into the camera is from surfaces parallel with the sensor, producing the lighter areas in the camera image, while textured surfaces and bevelled edges appear dark.

**Notes**

---

**Application**

**Stents: Quality control of medical implants**

Geometry, texture and dimension analysis of stents
A novel development in automated surface inspection and analysis

---

**Kieler Str. 212, 22525 Hamburg, Germany • Tel: +49 40 85 39 97-0 • Fax: +49 40 85 39 97-79 • info@SuKHamburg.de • www.SuKHamburg.com**