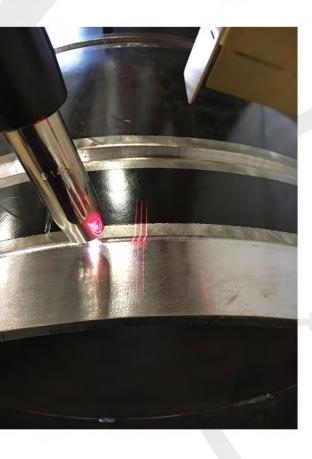


ADVANTAGES OF PATHFINDER SEAM TRACKING SOLUTIONS

Universal

- Suitable for all standard seam shapes
- Suitable for all standard surfaces, particularly reflective and high-gloss ones such as aluminum or stainless steel
- Interfaces to well-known robot controls available



Precise

- Exact identification of the seam and determination of the alignment of the sensor head to the seam thanks to the use of the three-line laser
- Above-average process reliability even with demanding seam tracking
- High measuring data recording stability
- Corrections in real-time

Dependable

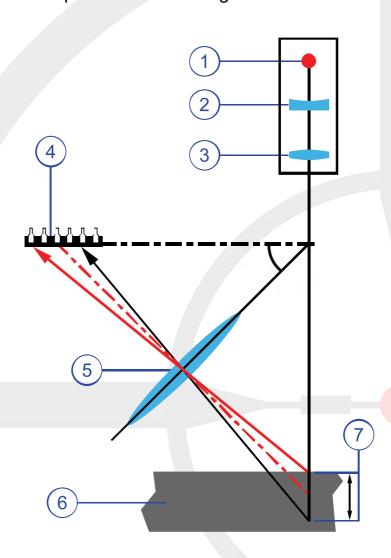
- Splatter protection with integrated air flushing of the protective glass and air cooling of the sensor
- Splash water-proof housing
- Optical filter to prevent falsified measuring results
- · Resistant to faults caused by electric fields





THE FUNCTIONAL PRINCIPAL

Schematic diagram of laser triangulation (= optical distance measurement) using the optical seam tracking sensor TH6x



LEGEND:

- 1. Laser Diode
- 2. Collimator Lens
- 3. Projection Lens
- 4. Light Detector
- 5. Receiver Lens
- 6. Object to be Measured (Component)
- 7. Measurement 1 and Measurement 2

SEAM SHAPE EXAMPLES

The contact free scanning of the components allows the sensor to be used for almost all seam shapes

