ThermoProfilScanner inline

Weld Seam Monitoring

- Approved method of non-destructive testing
- Passive thermography of the cooling seam
- Special IR-camera for welding applications with low maintenance

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Laser Welding Applications

- Incomplete penetration
- Asymmetrical penetration
- Misalignment problems
- Holes
- Porosity
- Plasma disturbances

Dectes

GUI during welding with automated seam evaluation

CO₂-laser welding with disturbances of the process gas detected in the thermal field
ERW Welding Applications

ThermoProfilerScanner placed behind the welding point

Cold welds detected in the thermal field

- Seam monitoring for **reproducible quality**
- **Automatic marking** of faulty parts
- **Visualisation** of the welding process
- Reducing of setup time
- Documentation and traceability of the NDT results

**Detects**

- Cold welds
- Roll pressure
- Edge offset
- Power drops
- Damaged coil edges

- 100% monitoring of weld seam
- Scrap reducing by real-time monitoring
- Reliable seam quality

Control cabinets in different versions for your needs

Application in ERW-welding
A look into the welding seam

- **Welding Irregularity**
- **Abnormal Welding Profile**

- Volumetric non-destructive testing of the weld seam based on thermography
- Measurement of the thermal field and calculating seam parameters like temperature, width and symmetry in real-time
- Automatic evaluation, marking and sorting of faulty parts or seams

- Worldwide applied since 2007
- Wall thicknesses: 0.05 to 25 mm at steel, copper, titan and others
- Application: tube manufacturing, automotive, medical technique, energy industry, aerospace, ...

Designed to withstand the conditions of a harsh welding environment:
- Optional with self-cleaning spatter shield
- Resistant against smoke, heat, vapour and shocks
- Low maintenance construction

**Arc Welding Applications**

- MAG-welding
- PTA - plasma-transfer-arc
- TIG-welding with cold-wire