Quality Monitoring During Welding

Detection of incomplete fusion, cracks and welding pores

Optimizer4D is able to detect and document faults in a welding seam in the moment the flaws occur. This includes detection of flawless seams.

**Detectable welding faults:** cracks (cold cracks), welding pores, incomplete fusion and burn-through.

Under certain circumstances, the following faults are detectable: weld seam position and fusion penetration. Optimizer4D is able to evaluate the quality of welding seams. By this, the measuring system contributes to **render security welding seams superfluous** - up to a certain percentage.

Additionally, in an ideal case, Optimizer4D can **reduce rework**. Automated detection of faults and emitting a signal via signal light or PLC is possible.
Cognitive Signal Analysis

100% In-Process

Tool Monitoring

Technology Leap

Process Optimization

Optimizer4D

Detection of tool wear

High Frequency Impulse Measurement

Product Quality

Process Evaluation

Crack Detection

Reduction of reject rate

Real-Time

Increasing production speed

Documenting Process Quality

QASS

200kHz