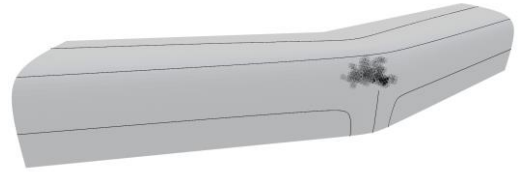


# SonicScan

## Robotic Ultrasound Inspection

### Module 1: Robotic path planning

The software module for path planning enables easy automatic coverage path planning. Coverage of regions inside the inspected part are considered. This enables inspection even of complex free-form surfaces.

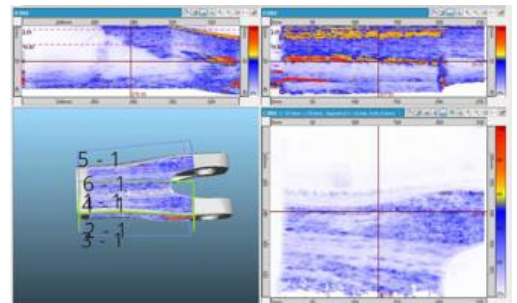


### Module 2: Robotic scanning

Hard- and software components work together for continuous scanning. The robot moves the ultrasound head along the surface while data acquisition takes place. Accurate positioning is realized via accurate synchronization.

### Module 3: Data analysis

Advanced methods such as adaptive total focusing method (TFM) and machine learning methods enable partially or fully automatic evaluation of scans.



### Technical details:

Supported robots: Stäubli, Kuka, (easy extension to other systems possible)

Available UT methods: single transducer, linear phased array

Two possible synchronization mechanisms:

- high-accuracy HW-trigger or
- flexible time stamps

Automatic detection of defects and flaws

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