

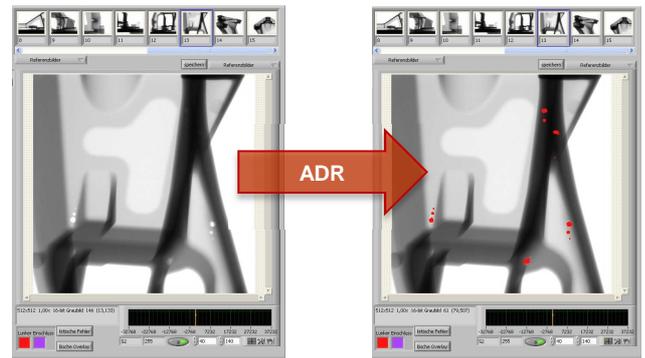
AUTOMATED DEFECT RECOGNITION

FOR 24/7 AUTOMATED IN-LINE INSPECTION

Especially industries with very high production volume demand a fully Automated Defect Recognition (ADR). The VisiConsult in-house developed ADR is compatible to all image sources on the market and fulfills all international standards like VW, BMW, ASTM etc. With many installations on the market our systems run 24/7 without human interaction. An offline station is used to train the inspection sequences and review the results. This leads to a completely decoupled procedure for 100% system uptime.

Typical ADR applications are the detection of porosities, inclusions or cracks. It is possible to define certain ROIs and check for defect metrics like defect density, defect distance, defect size and many more. Thresholds can be defined dynamically. Training of the system does not require any programming skills.

- Detection of defects or error metrics and patterns
- Advanced dimension and completeness checks
- Offline configurator and review station
- Automated text recognition from X-ray images
- Compliant to company standards (BMW, Audi etc.)



More demanding tasks like automated measurement, completeness or density checks can be performed through the **Xplus^{VAIP}** (VisiConsult Automated Image Processing). This in-house developed tool is the most powerful ADR on the market. Complex test sequences can be performed on static images or real time. Typical applications are the behavior of heat pumps under different temperatures and completeness checks of valves.

To ensure a correct part handling our ADR can work with RFID chips, data matrix codes, bar codes or even read the part number out of the X-ray image. Optionally we can supply a marking device to mark errors or the test result. After inspection images can be stored in a DICONDE database, different image formats or inside a test report.

