

InspectionWorks Analyze

The Al-based software solution that helps you display faults and identify defects at the push of a button – so you can make better decisions, faster

- Detect defects faster and more reliably
- • Increase the number of inspections and free up team capacity
- • Allow algorithms to learn over time, so predictions become better

Inspection starts here.



Defect recognition software that is tailored to your needs

While the application areas for industrial inspection continue to grow, quality and safety standards that have to be met by manufacturers and operators across industries are becoming ever more stringent. From CT scanning batteries for electronic vehicles (EV) or the consumer electronics industry to the ultrasonic testing of railways and remote visual inspections of aircraft engines to the visual inspection of aircraft turbines – inspectors are under pressure to make correct and consistent decisions, without disrupting operations more than absolutely necessary.

NDT data – whether it is collected via X-ray, CT, ultrasound, borescopes, videoscopes, or eddy current – enables the reliable detection of various types of nonconformities. However, manual data interpretation is slow, subjective, and sometimes inconsistent. This leads to slow throughput and error-prone results.

InspectionWorks Analyze boosts speed and safety

InspectionWorks (IW) Analyze helps solve these problems using Assisted and Automated Defect Recognition (ADR). It is cutting edge software with algorithms that display faults in inspected assets with – or even without – the push of a button, helping inspectors identify defects faster and better than ever before.

The next generation ADR tool leverages modern deep learning algorithms to achieve faster, more reliable, accurate, consistent results. It thereby helps you perform more inspections per hour, thus increasing the capacity of your team and boosting your productivity while reducing scrap and ensuring inspection reliability and product safety.

Based on 30 years of ADR experience within Waygate Technologies, IW Analyze complements the diverse Waygate Technologies portfolio of ADR algorithms utilizing AI for X-ray and CT scans of castings and batteries, borescope-based inspections, and more.

Moreover, it takes Al and DL based inspection to the next level. IW Analyze lets you automatically report results on inspected parts within the production line. It also facilitates storing algorithms and NDT data in the cloud as well as on the hardware, allowing faster decisions and the continuous improvement of the deployed algorithms

Quality Reduce human factors (fatigue, distractions, bias, complacency)

Speed Accelerate your decision-making by order of magnitude

EscapesMeet technical requirements

Reduce costs through Assisted and Automated Defect Recognition (ADR) and address:

Resource constraints
Evaluate anywhere,
anytime

The big picture

Move to fully digital, tracable results, set the stage for fast, historical re-evaluation and see what's hiding in the data

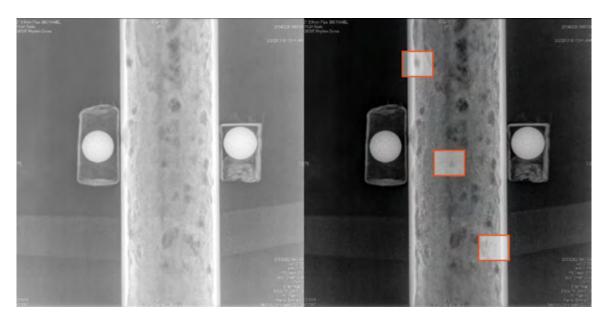


IW Analyze converts inspection data into valuable insights using smart, intuitive tools supported by Al-engines to enable fact-based decision making

Customized for every application

The software experts at Waygate Technologies can customize pre-trained IW Analyze algorithms to the specific needs, data source, and application of every customer the pre-trained IW Analyze algorithms to the specific needs of every customer and application – regardless of the manufacturer of the used inspection hardware. With just a limited data set provided by the customer, Waygate Technologies can define the relevant defects and set the initial deflection threshold. Through continuous optimization, the expert team at Waygate Technologies then reduces the false positive rate so inspectors can rely

on accurate and certain results – in the field or during a subsequent evaluation. The data can also be used retrospectively, as everything is stored safely in the cloud. Automated, reanalysis of historical data may be especially attractive when combined with customized or updated ADR models, in order to control asset failure in the field and recalls. While the standard IW Analyze solution is trainable and can be optimized using customers' data, IW Lite is fixed and makes decisions based on an ADR model. It can only be trained by WT representatives.



With the push of a button the algorithms of IW Analyze display faults and identify defects automatically. IW Analyze even automatically reports results on inspected parts within the production line. Generated data can be used to further advance the detection algorithms and make better predictions about your product.

















Current product offering - fields of application

Battery Inspection (CT)

- Overhang analysis
- Mid-tab
- Inclusions

3D Speed|ADR (Speed|scan CT64)

- Casting defect detection and classification
- Composite delaminations
- Wall thickness
- Actual-nominal comparison

Visual ADR (MViQ 3.60+)

- Aviation:
 - Aiir Lite Blade
- Aiir Edge Hot Section
- Power gen:
 Gas Power assist-S
- Blade Counter (Live analytic)

Casting (X-ray)

 General casting defect detection and classification

XE² for electronics X-ray

- Programmable for 2D X-ray applications, including:
 - PCB
 - Solder ball inspections

Unique customer solutions (across modalities and applications)

- Visual weld assessment
- Electronics
- Oxidation and coating losses
- Cracks
- Moldings
- Pipe corrosion



Contact your local sales representative for a demo or visit our website

