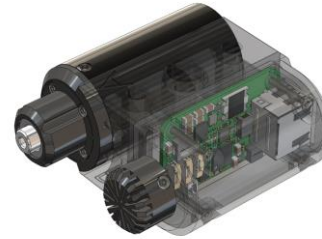




TECHNOLOGY DESCRIPTION

Resoniks' Acoustic Quality Control System uses acoustic frequency analysis and artificial intelligence (AI) to detect microfractures, weld defects and material degradation in real time. The system comprises a modular sensor unit, data processing software and an intuitive user interface, enabling seamless integration into production lines or standalone operations. The technology ensures mission-critical reliability by identifying internal anomalies in aerospace components. Through a successful partnership with Fast & Fluid, the system was adapted for industrial applications such as liquid level detection in paint dispensers, demonstrating its scalability and versatility. Applications include defect detection in manufacturing processes, real-time monitoring of industrial equipment and quality assurance for precision-engineered components.



INNOVATIVE ASPECTS

- Detects internal defects without altering or damaging components
- Operates autonomously with real-time feedback, reducing reliance on skilled labour
- Adaptable to various industries, from aerospace to industrial manufacturing
- Reduces quality control costs by up to 50% compared to traditional methods, such as X-ray or CT scanning
- AI integration allows active learning mechanisms enhance detection accuracy, minimising false positives and operational disruptions



TECHNOLOGY READINESS

TRL 7 (2024)

COUNTRY OF ORIGIN

Netherlands

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TAGS

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APPLICATION AREAS

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Manufacturing

Additive
Manufacturing

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Applications

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Component
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