



**VISION  
INTELLIGENCE**

**Supercharging productivity on  
manual assembly lines using AI**

## About Vision Intelligence

At Vision Intelligence, we specialise in digitising manual assembly processes in manufacturing organisations. Our product, VIOLET AI, uses leading-edge technology that can help a business transform their manufacturing productivity, skill development and compliance.

Despite advances in robotics and automation, human action still dominates manufacturing for two main reasons:

- Functional limitations - robotic processes often can't compete with human dexterity and real-time decision making.
- Cost - a typical robot approaching human capability is far out of reach for most SME budgets.

Our VIOLET AI system augments human capability and supports front-line assembly operators at a manufacturer to make products with reduced defect rates, reduced waste/energy and reduced operator training requirements, ultimately leading to improved productivity, profitability and sustainability.

## What is VIOLET AI?

VIOLET AI is a smart system that uses cameras and sensors to capture the actions and outcomes of assembly workers. It can detect any defects or errors in the production process, missed steps/parts and/or misalignment for example. It can also alert the workers and supervisors of any issues and highlight corrective actions in real-time.



VIOLET AI will also record the best practices of skilled workers to ensure the businesses standard operating procedures (SOPs) are always followed with the related footage being available to train new or less experienced staff. This way, the business can ensure that its workers are following the same quality standards to reduce rework/waste in production.

VIOLET AI also generates a digital DNA of each part or assembly that is produced, which contains information such as the date, time, location, worker ID, defect rate, etc. This data can be used for traceability/continuous improvement, compliance and health and safety considerations, as well as providing root cause analysis (RCA) data at your fingertips to improve processes, understand actual labour time taken and provide reassurance to their customers.

## Why use VIOLET AI?

VIOLET AI system will help you and your assembly operators by working in unison to:

- Increase right first time (RFT) rate and reduce your waste, rework and energy costs.
- Enhance skill development and knowledge transfer among workers.
- Improve compliance and traceability with digital records and reports.
- Gain insights into production performance and identify areas for improvement with previously unobtainable data.

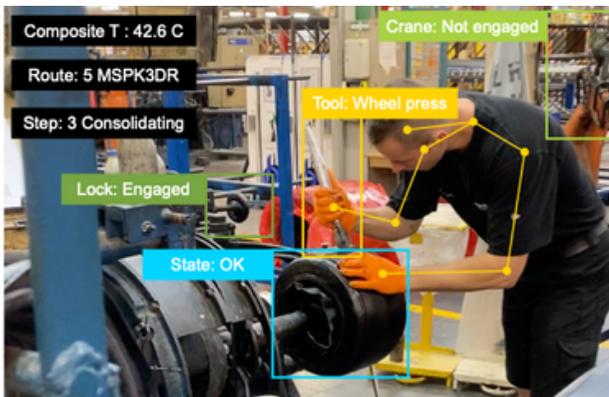


## Ethics and user experience at the heart of VIOLET AI

At Vision Intelligence we are dedicated to empowering manual manufacturing workers. Our belief is that these workers are the industry's backbone, and our system VIOLET AI is designed not to replace them but to enhance their skills and efficiency.

We are committed to providing this collaborative and ethical AI tool at prices accessible to both SMEs and larger corporations.

VIOLET AI respects the dignity of the workforce, emphasises transparency, and promotes a harmonious partnership between AI and humans. Guided by key principles, improving workforce engagement, managing uncertainty, optimising quality and efficiency, gaining trust and acceptance, improving jobs and work culture, safe and transparent data collection and analysis, all the way to ensuring compatibility and successful integration, we aim to shape an AI-assisted world that sustains and enhances manual manufacturing operations.



*Deploying VIOLET AI is like having a quality control engineer, a compliance specialist and a trainer at every station on the factory floor.*

- Andrew Goodier, COO Dunlop Aircraft Tyres UK

Part of our work (UK government funded) includes our 'Ethical Alignment Survey,' designed to evaluate the alignment of various stakeholder groups within a manufacturing company. The purpose of this survey is to detect subtle differences in how each group prioritises their goals and the means of achieving them. Stakeholders rate their agreement with statements representing synthesis or antithesis positions on human factor-derived dialectics. By promoting internal alignment within the organisation, we enable manufacturers to proactively address differences and pave the way for smoother, more efficient, and ethical adoption of AI systems. This survey is a vital step in our ethical works package, ensuring our AI solution aligns with not only the technical needs of a manufacturer but also those of its diverse workforce.

# Contact Us



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Welcome to  
assembly 4.0