

Elevating Reliability and Efficiency with ViTrox's V-ONE Hardware Monitoring Feature

In today's fast-paced manufacturing landscape, the need for reliability and efficiency is paramount. Manufacturers must have the ability to predict and prevent equipment failures to minimise downtime and maximise productivity.

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As the world-leading machine vision solutions provider, ViTrox is thrilled to introduce a transformative feature within its Industry 4.0 Manufacturing Intelligence Solutions - V-ONE – Hardware Monitoring. V-ONE's Hardware Monitoring feature is able to track machine health to prevent unwanted disruptions effectively. The software also monitors the vision module, enabling early issue identification and providing users valuable insights in scheduling maintenance to minimise interruptions.



Comprehensive Monitoring for AOI and AXI Machines

A standout feature of V-ONE's Hardware Monitoring is its adaptability. This feature offers a systematic approach to maintenance tracking for AOI (Automated Optical Inspection) and AXI (Automated X-ray Inspection) machines, setting new standards for equipment reliability. Whether you are conducting

inspections with AOI or utilising X-ray technology in AXI, ViTrox's Hardware Monitoring provides a vigilant eye on your critical assets.

1. AOI Hardware Monitoring: A Vision for Maintenance Excellence

The Hardware Monitoring encompasses crucial components of the V510i 3D AOI system, specifically the conveyor module and vision module. The data collected during routine calibration of the vision module, including the light source, camera, and projector, reflects its condition and status.

AOI Hardware Monitoring can detect any noticeable trends indicating potential deterioration of the vision module well in advance. This proactive approach allows users to schedule downtime for maintenance rather than reacting when issues arise. Ultimately, users can gain optimal AOI Machine Utilisation (MU) and Overall Equipment Efficiency (OEE).

2. AXI Hardware Monitoring: Keeping a Close Eye on Critical Components for Performance Consistency

For AXI Hardware Monitoring, the focus is on the confirmation, diagnostics, and adjustment (CD&A) tasks, which involve assessing area mode image, x-ray source, base image quality, and system image quality. These components play a pivotal role in the accuracy and efficiency of AXI inspections.

By continuously monitoring these critical aspects, AXI Hardware Monitoring enables engineers to gather relevant and insightful information for the purpose of tracking and performance evaluation. This level of oversight ensures that AXI machines maintain peak performance, resulting in consistently high-quality inspections.

Seamless Data Compilation and Analysis

V-ONE's Hardware Monitoring goes a step beyond monitoring by collecting all relevant machine hardware and calibration data. This valuable data is securely uploaded to the ViTrox V-ONE Server. This centralised repository becomes a goldmine of information, offering insights into the performance and health of your equipment.

By centralising essential machine hardware data, V-ONE delivers unprecedented transparency in machine health. Engineers can readily access this data to plan service intervals, proactively address potential issues and track back past and present records for performance monitoring. This approach ensures that equipment reliability is maintained at its highest level.

Efficiency Enhancement & Cost Savings for Manufacturers

The implementation of V-ONE's Hardware Monitoring feature delivers tangible benefits. Flexible service intervals, driven by comprehensive maintenance tracking, enhance Overall Equipment Effectiveness (OEE) performance. This could help users reduce unplanned downtime, ultimately leading to increased savings on servicing costs.

By proactively identifying and addressing potential failures, V-ONE minimises repair expenses and production delays. This optimisation of resource allocation and equipment utilisation empowers manufacturers to rely on the reliability of their equipment.

One of the most valuable aspects of V-ONE's Hardware Monitoring feature is its time-saving capability, eliminating the need for engineers to continuously monitor machine health manually. This time-saving efficiency enhances operational productivity, allowing engineers to focus on critical production tasks.

Key Takeaways

In conclusion, ViTrox's V-ONE Hardware Monitoring feature is a game-changer in enhancing equipment reliability and efficiency. With its comprehensive coverage of AOI and AXI machines in monitoring hardware performance and seamless data compilation, V-ONE empowers manufacturers to stay ahead in today's competitive manufacturing landscape. V-ONE's Hardware Monitoring is the key to ensuring seamless operations, efficient resource utilisation, and cost-effective maintenance strategies, setting the stage for manufacturing excellence.

Interested to know more about how to optimise your production's efficiency? Feel free to reach out to us at [**enquiry@vitrox.com**](mailto:enquiry@vitrox.com).

Contact Us

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