

Industrial safety compliance and automated inspection

Using AI on existing video surveillance system



Overview

It is critical for industrial organisations to ensure operational efficiency, safety and monitor the work environment. This helps foresee and avoid compensation liability risks, as well as take immediate action if a safety violation occurs. However, it is a daunting task considering the wide spread area and number of shifts.

Key Challenges

- **Adherence to SOPs**
Industries have well-defined SOPs for managing operation efficiency, but it cannot be maintained unless they are tracked for compliance.
- **Lack of Automated inspection**
Dependence on humans for manual surveillance of large and complicated industrial units is slow and inefficient.
- **Hefty fines for workplace accidents**
Every industrial operation has a primary issue for worker safety. Non-compliance with safety SOPs can result in death and severe penalties for the company.



The cost of non-quality is 5% of turnover for majority of companies.



45% of screen activity is missed after 12 minutes and 95% after 22 minutes of continuous video monitoring.



Industrial accidents take 2 million lives and cost an estimate of \$1.25 trillion to the global economy.

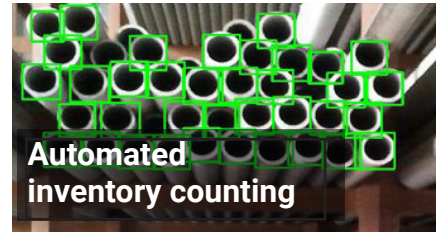
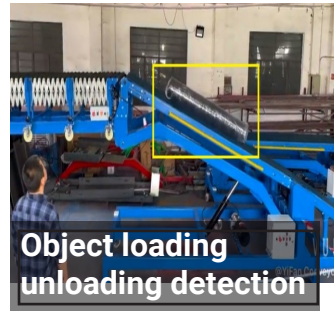
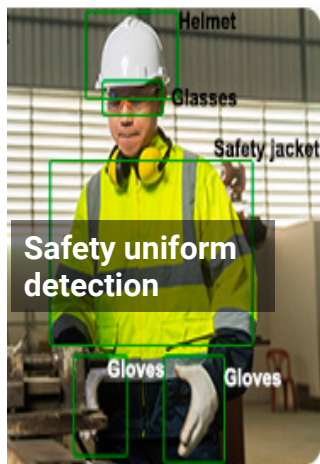
Introducing AIVID

Improve Safety, Enhance Operational Efficiency with real time video Intelligence

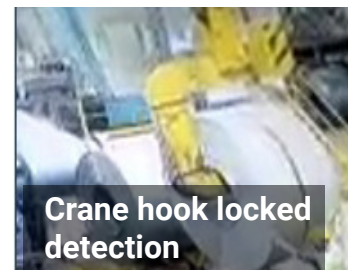
By automating human observation-based process inspections, AIVID empowers industries to limit the risk of non-compliance and aim for safe and secure work environments, while improving operational efficiency. For instance, the platform may automate the inspection of items during loading and unloading or detect non-compliance with standard operating procedures (SOP) such as unlawful entrance or incursion in real-time and provide alerts to authorised people.



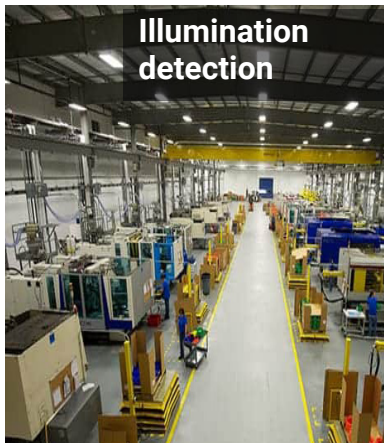
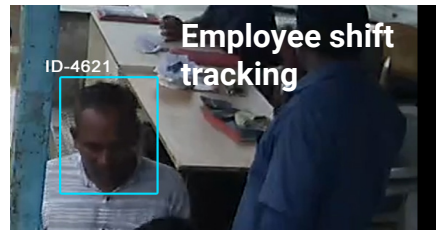
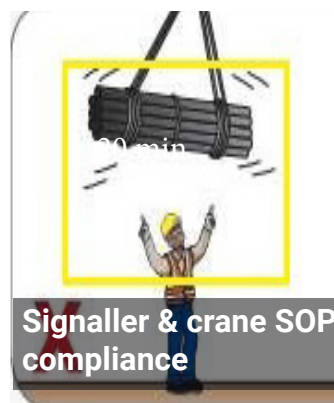
AIVID BOTS for Industrial Safety and Automation



Workplace Compliance

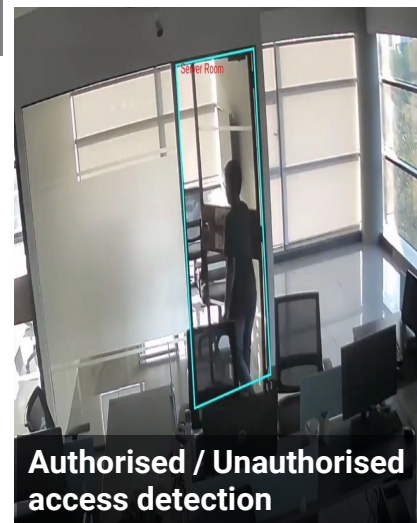
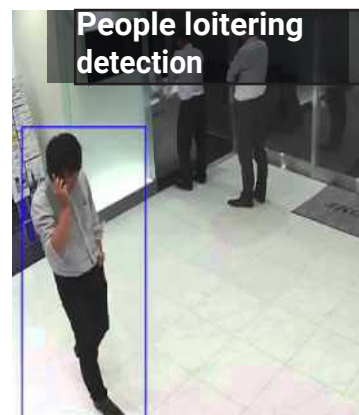


Safety Compliance



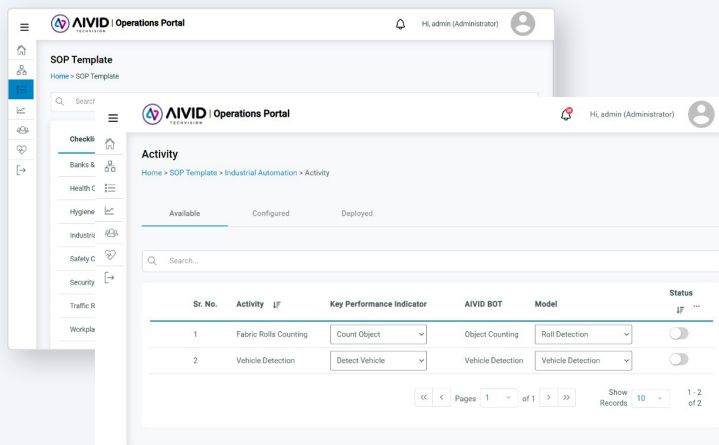
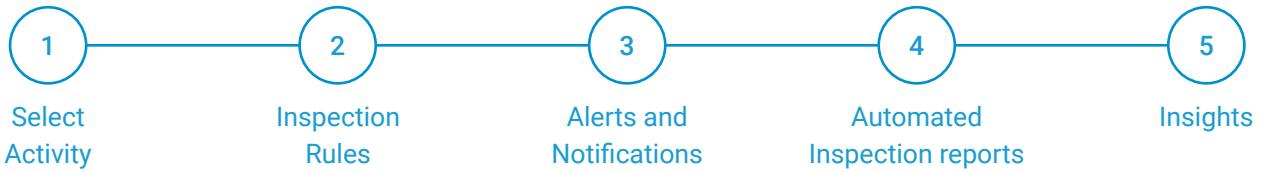
Security Compliance

Hygiene Compliance



How we do it differently?

AVID offers a simple, ready-to-deploy platform with intuitive visual interface to select from predefined activity powered by AVID AI BOTs to automate inspection at the click of a button across all locations & generates real-time insights with alerts and reports visible at central location & site level.

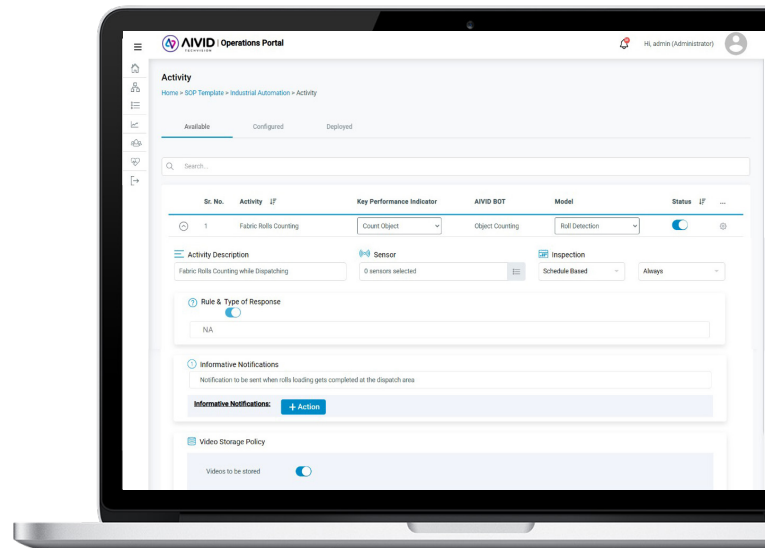


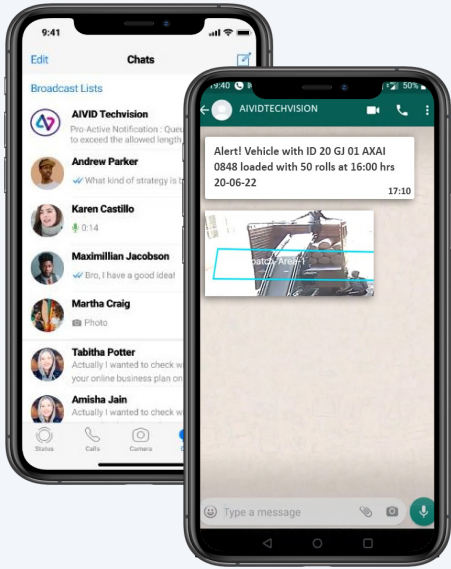
1 Select activity

Easily get started with predefined activities from the AVID operations portal, configure SOPs and their visual inspections to be done by AVID BOTs..

2 Inspection rules for compliance & non-compliance

Put AVID BOTs to work, add inspection rules for compliance and non-compliance, inspection zone, alerts and insights.





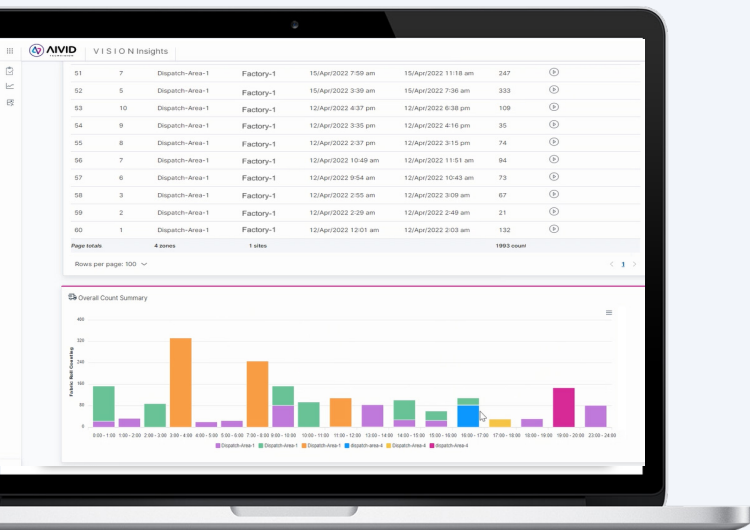
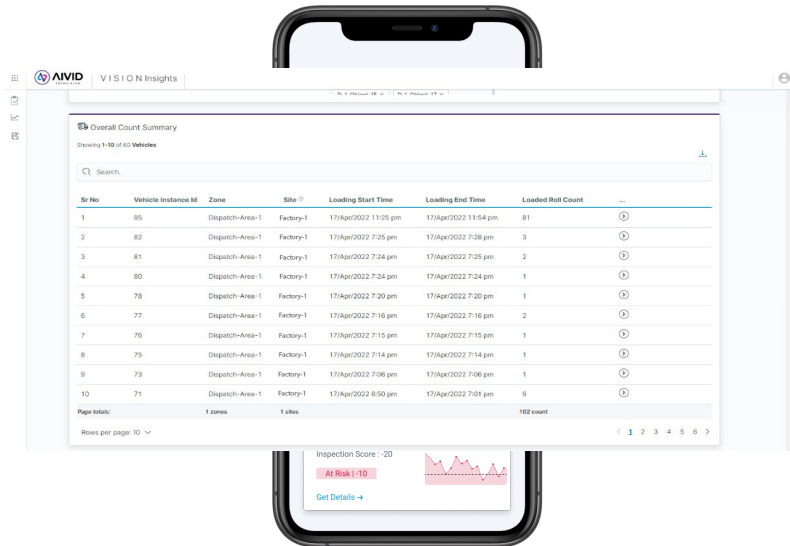
3

Get alerts in real-time.

- Timely notifications help your team minimize the impact of a compliance breach.
- AVID BOTs help you detect anomalies with real-time & SOS notifications.

4 Automated inspection reports

Get scheduled auto inspection reports for all compliance and non-compliance for all the activities auto inspected by AVID BOTs. Set up rules to automatically email the reports to the right team members.



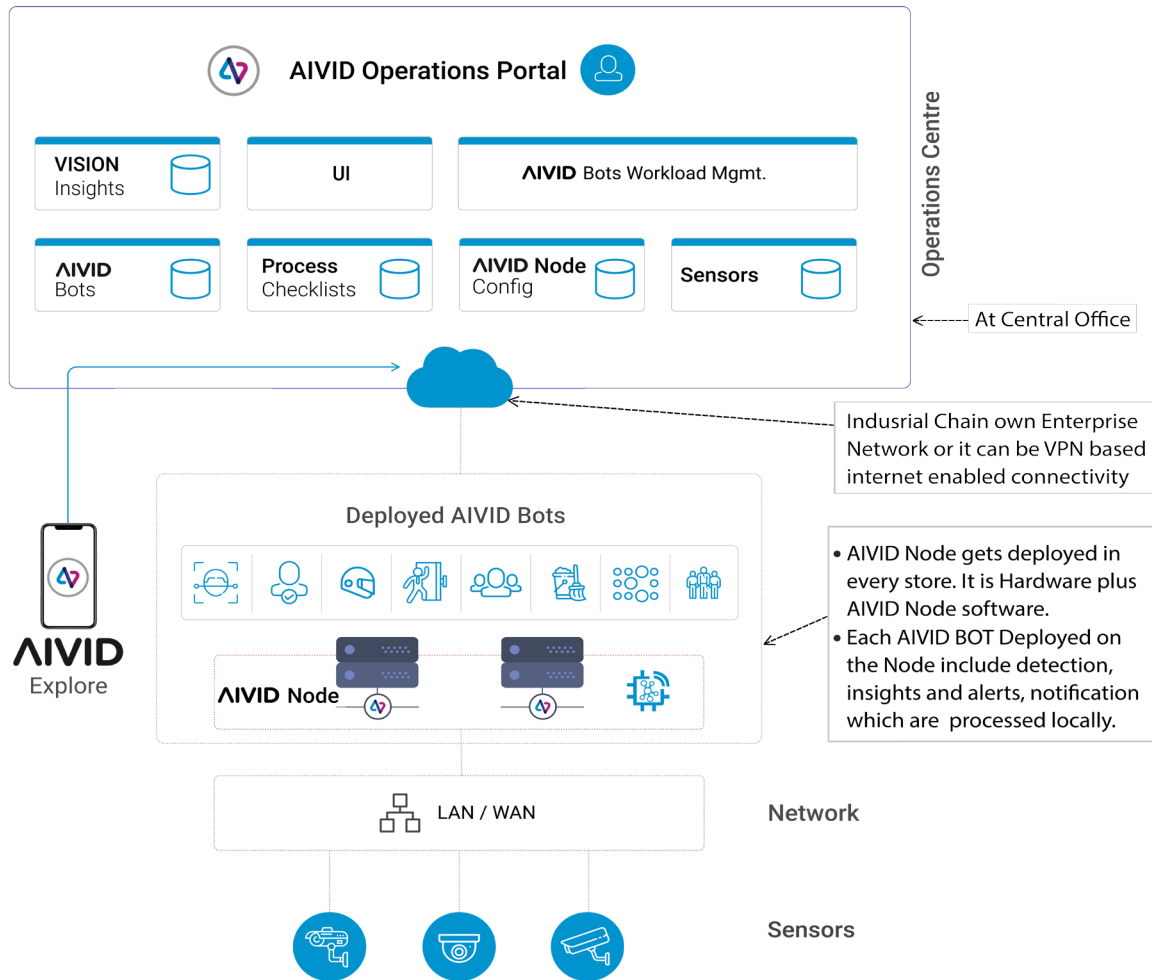
5

Derive insights across all sites on one platform

See Insights across all sites at a glance with ability to quickly spot sites that are low in compliance. Get visibility in real time as the inspection is conducted by AVID BOTs...

AIVID Platform

AIVID platform leverages AI and Deep learning technology for training AIVID BOTs on specific activities. The platform based on cloud technology supports a distributed architecture, efficiently scales to multiple locations, and optimises resource utilisation across multiple use cases.



The platform components



AIVID BOTS

Deep Learning Models pre-trained by AIVID TechVision for specific set of activity



AIVID Node

AIVID Node is the Deep Learning Engine - Hardware and Software deployed in the customer network, It can easily integrates with any IP camera.



AIVID IoT Gateway

AIVID IoT gateway coordinates and schedule communication between AIVID Node and AIVID BOTs or user-selected third-party wireless motion, temperature or fire sensor to enable alerting system via buzzer and LED signal if any sensor deviation occurs.



AIVID Explore

Notifications and Alerts on the move with AIVID Explore.



AIVID Customer Operation portal

Central customer operation portal, web based UI for management of the BOT, SOP Checklist and activity

Key Features



Plug and play with your existing IP camera



Offers unique KPI based SOP/Activity inspection automation



Low bandwidth requirement with edge based processing of event and only metadata sent to central server



Supports single-click view of video proof from dashboard data anomalies and outliers



Easily configure and change rules from a single screen



Supports edge-based distributed architecture with central orchestration



Get better accuracy with custom trained deep learning models trained on your specific dataset



Offers smart video searchability for streamlined identification of anomalies with proof



Control who sees what with role-based access



Reduces storage requirements significantly compared to typical NVRs



View central insights across all location from a single dashboard



Provides real-time alerts to enhance security and ensure timely response to incidents

Transform your security and operation with AIVID



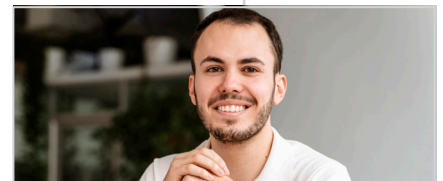
Security Manager

- Real time alerts & notification for events
- Faster investigation
- Proof of incident



Production Manager

- Overview of production process, staff presence, product count, product defects
- Identify any defects in production process
- Receive alerts and notification in real-time.



General Manager

- Central view across all location
- Identify operational improvement area
- Monitor and improve production process.



AIVIDTECHVISION PVT.LTD.

303 WestFace, Zydus Hospital Road,

Thaltej, Ahmedabad - 380054, Gujarat, India

info@avidtechvision.com

www.avidtechvision.com

