OPTIMIZING INTRALOGISTICS WITH VISION AI

Scandinavian Tobacco Group Belgium Manufacturing N.V. lifts the efficiency of intralogistics to the next level with Nipper AMRs and ConnectedThinks® AMR orchestrator solution!

Case Study

At a glance

Locixx GmbH and Nipper B.V implemented a Vision AI-based AMR Orchestration solution at Scandinavian Tobacco Group Belgium Manufacturing N.V.. The system monitors locations, detects objects in real-time, and sends commands to the AMR Fleet Manager. The case study delves into the solution's benefits, cost savings, and scalability.

Significant Cost Reduction

Vision AI solution led to a 35% cost reduction due to lower installation and maintenance costs, and improved operational efficiency. Increased accuracy and reliability reduced downtime, minimizing operational disruptions and further saving costs.

€ 35%
Cost Reduction

locixx® GmbH
VISION AI AND INDUSTRIAL IOT

NIPPER production logistics

CHALLENGES

Scandinavian Tobacco Group Belgium Manufacturing N.V. is a leading company in the tobacco goods manufacturing sector, committed to innovating its intralogistics operations. The company faced increasing demands for production output while managing labor costs and operational efficiency. The need to move more pallets and produce goods with fewer staff became a critical goal.

SOLUTIONS

Scandinavian Tobacco Group Belgium Manufacturing implemented the vision AI-based ConnectedThinks® AMR orchestrator solution from Locixx GmbH, in conjunction with Nipper Autonomous Mobile Robots (AMRs) from Nipper B.V.
The Vision AI system monitors key pickup and dropoff locations at manufacturing facility through strategically placed cameras. These cameras capture real-time footage, which Connectedthinks' AI algorithms process to detect objects and send precise commands to the AMR Fleet Manager provided by Nipper B.V. The AMRs then execute tasks based on these commands, optimizing the workflow and enhancing overall productivity.

BENEFITS

1 Advanced Vision AI vs. Proximity Sensors

- Enhanced detection over a broader area with a single camera
- Higher Accuracy. Vision AI systems reduce false positives and negatives
- Versatile application. Capable of detecting various object types, including different pallet types, enhancing the automation logic

2 Ease of Installation and Integration

- Ease of installation without major infrastructure changes
- Simplified integration with the AMR Fleet Manager, ensuring quick deployment and transition to automated operations

3 Significant Cost Savings

- Vision AI solution led to a 35% cost reduction due to lower installation and maintenance costs, and improved operational efficiency
- Increased accuracy and reliability reduced downtime, minimizing operational disruptions and saving costs
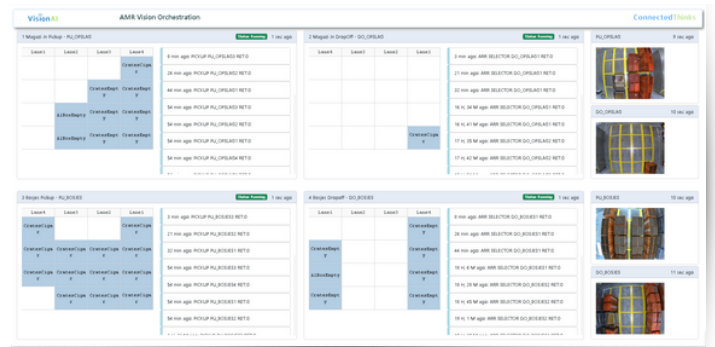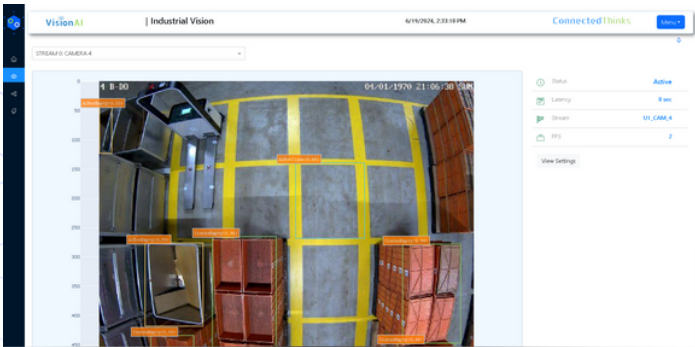
4 Flexibility and Scalability

- Scalable Architecture: The solution scales effortlessly from a few cameras to hundreds, accommodating growing operational needs
- Centralized Monitoring: A centralized control system allows for the real-time monitoring and management of multiple camera feeds

5 Security and Privacy

- Vision AI system incorporates advanced encryption, security protocols, and authentication systems to ensure authorized access
- The system processes video/images in real-time. It does not store videos/images nor transmit them outside the private network, ensuring the highest levels of privacy and compliance are maintained
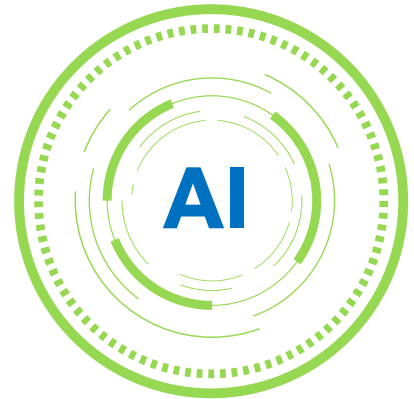
SUMMARY

By integrating the ConnectedThinks® AMR orchestrator solution and Nipper AMRs, Scandinavian Tobacco Group Belgium Manufacturing N.V. has significantly improved its intralogistics efficiency. This partnership not only reduced operational costs and space requirements but also enhanced safety and scalability. The innovative approach taken by Scandinavian Tobacco Group Belgium Manufacturing N.V. sets a benchmark for companies in the production, manufacturing, and intralogistics industry, showcasing the potential of combining vision AI and autonomous robotics to revolutionize logistics operations. For more information, visit ConnectedThinks Vision AI and Nipper AMRs.

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