LIFT CASE STUDY

How a Rolled Goods Manufacturer Modernized Operations with AGVs

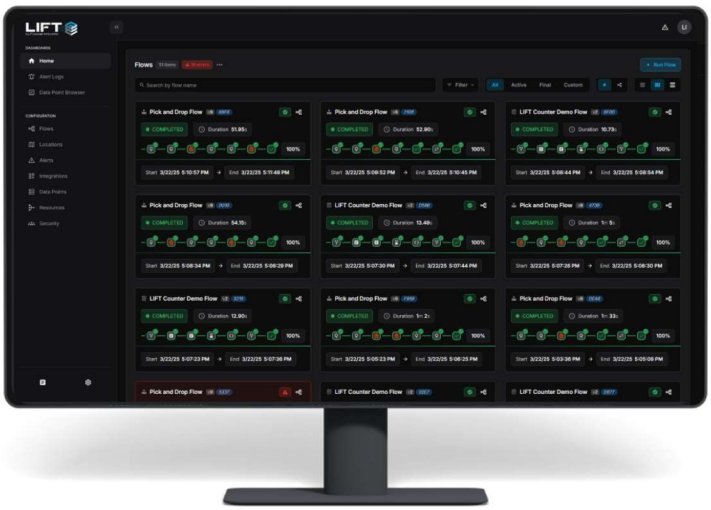
LIFT by Flexware Innovation™

lift.software

Expanding production and warehousing capacity can be an exciting step for manufacturers, but it also brings new pressures. When a rolled goods manufacturer encountered this challenge, the team recognized it was time for a new approach. To stay competitive and support continued growth, they began modernizing their facility with automation, starting by replacing operator-driven hoist trucks with Automated Guided Vehicles (AGVs).

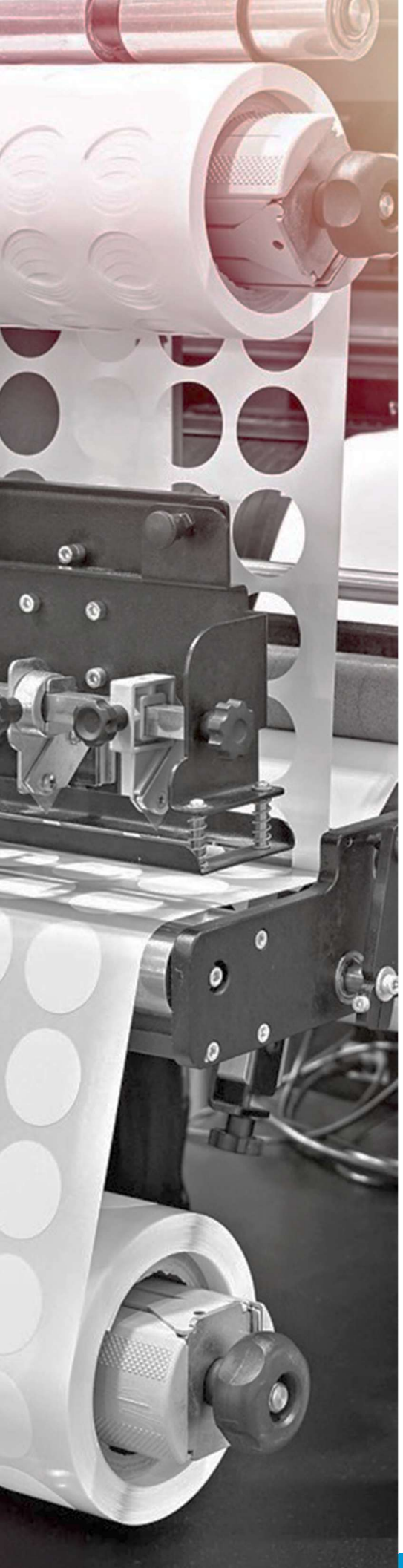
However, with modernization came new complexity. Integrating AGVs into existing processes and coordinating their movement across the plant proved difficult. Looking for a better way to manage these demands, the team turned to LIFT, Flexware Innovation's intralogistics platform.

Learn how the team transformed their automation challenges into opportunities for greater efficiency and scalable growth.



THE CHALLENGE: SILOED DATA

Before implementing LIFT, the team faced a host of operational challenges. The new AGVs were expected to perform complex, dynamic tasks such as feeding production equipment, stocking WIP areas, removing scrap material, and delivering finished goods to designated shipping areas.



While the robots could physically transport loads, they lacked the data and logic needed to determine when and where the materials should be moved, forcing operators to intervene manually.

The absence of key data from other facility systems prevented the AGVs from:

- Receiving notifications when rolls were ready for transfer
- Accessing accurate pickup location details
- Determining the correct drop-off locations

These gaps not only reduced the ROI the manufacturer aimed to achieve from automation but also led to:

- Increased cycle times
- Slower production flow
- Constraints on the tasks AGVs could perform autonomously
- Frequent human intervention

To unlock the full value of automation, the manufacturer needed a solution that would enable seamless communication between AGVs and existing facility systems.

THE SOLUTION: SEAMLESS DATA FLOW

LIFT became the obvious choice for the manufacturer, as it provided the robust orchestration required to automate complex and dynamic workflows.

To build the foundation for that orchestration, the team needed to integrate their MES and ERP with the AGVs. Once connected, the AGVs could access real-time schedule data and perform dynamic tasks.

From there, the team leveraged LIFT's intuitive drag-and-drop interface to define conditional logic for continuous monitoring of trigger points across the facility and maintaining multiple queues of staged and active AGV missions. At the operator level, LIFT interfaces allowed workers to request, confirm, and monitor AGV actions.

As a result, the AGVs were able to support a broader range of capabilities, such as:

- Routing materials to either WIP storage or directly to production locations based on real-time demand
- Delivering non-compliant rolls to the appropriate scrap, hold, or rework areas
- Ensuring rolls requiring rotation passed through the rotating machine before final delivery
- Selecting warehouse locations using criteria such as mission routing, availability, and predefined business rules

Together, these capabilities transformed the manufacturer's AGVs from simple transport vehicles into intelligent assets capable of automating complex workflows.

About LIFT

LIFT by Flexware Innovation is an intelligent intralogistics platform designed for manufacturing and warehousing organizations.

LIFT connects and coordinates work between AGVs and AMRs, various personnel, and enterprise systems based on real-time information and activity. It unifies both autonomous and manual logistics operations, including forklifts, pallet jacks, and tuggers, into a single, integrated system.

THE OUTCOME: FULLY INTEGRATED AGVs

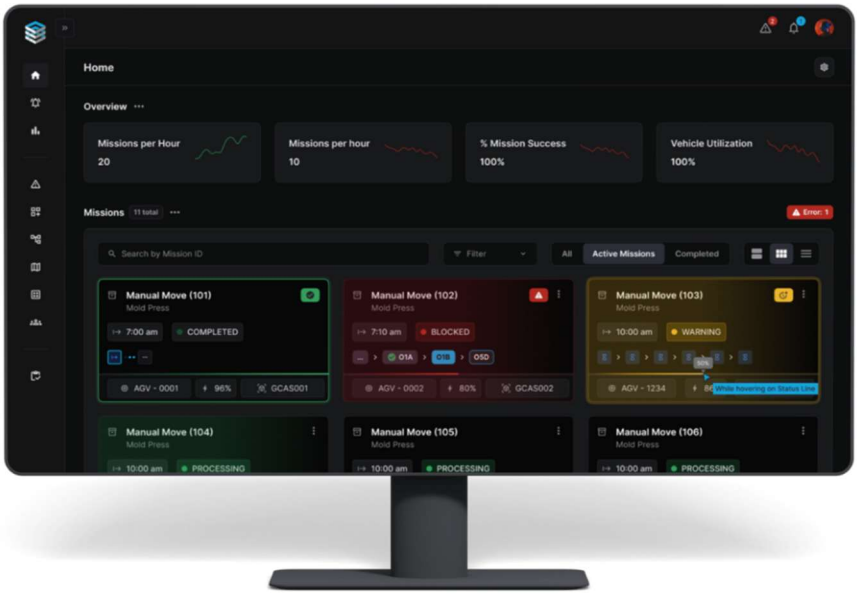
LIFT now manages all material movement across the manufacturer's facility, coordinating both AGVs and human-driven vehicles as they move between production lines, shipping areas, and the expanded warehouse.

Its intuitive interface also gives the team the flexibility to reconfigure missions and add new equipment or vehicles as operations evolve.

After implementing LIFT, the rolled goods manufacturer quickly began seeing measurable results. Those gains translated directly into new efficiencies across the operation, allowing the team to:

- Significantly reduce manual material movement, saving workers time and allowing the facility to scale without additional labor
- Streamline material flow across every stage of production, improving consistency
- Gain real-time visibility, enabling faster and more informed decision-making

While the performance gains were remarkable, the most meaningful change was the facility's ability to **automate 100% of the bulk roll movement**, unlocking a level of consistency and throughput that wasn't possible before. The manufacturer also significantly expanded their operations **without increasing headcount**, saving money and establishing the facility as a flagship example of efficient, scalable automation.



By connecting every movement and system through LIFT, the manufacturer has turned intralogistics into a strategic advantage, improving efficiency, productivity, and readiness for future expansion.