



CYNGN

AT COATS, THE DRIVEMOD TUGGER AUTOMATES 60 LABOR HOURS EACH WEEK

EXECUTIVE SUMMARY

- **3,990 autonomous missions completed.**
- **1.5 material handling roles redeployed.**
- **1,815 km of autonomous travel.**

Coats manufactures equipment used in automotive service and repair facilities and operates its Tennessee plant with a focus on low-cost, flexible manufacturing. Before automation, internal material delivery relied on forklifts, manual tuggers, and employees pushing carts across the facility, requiring about 1.5 full-time employees dedicated to delivering materials and returning empty bins.

To streamline this process, Coats deployed CynGN's DriveMod autonomous tugger, which now runs continuously across the plant with 5–10 delivery stops per route. The system replaced reactive supply runs with a predictable delivery loop and has completed nearly 4,000 autonomous missions serving production workstations.

In its first year, the vehicle logged 1,845 hours of autonomous operation and traveled more than 1,800 kilometers inside the facility, absorbing the workload of manual material runs. The result is more consistent material delivery and the ability to redeploy labor to higher-value production work while the facility continues to grow.

COATS

COMPANY INFORMATION

- Automotive service equipment manufacturer
- Lavergne, Tennessee Facility
- **160,000 sq. ft.**

COMPANY CHALLENGES

- Manual material delivery
- Labor time spent transporting materials
- Inconsistent supply runs to production lines

KEY RESULTS

- ✓ **3,990 autonomous missions completed**
- ✓ **1.5 material handling roles redeployed**
- ✓ **1,815 km traveled**
- ✓ **ROI within 2 Years**

RESULTS

Since deployment, the DriveMod Tugger has completed **3,990 autonomous missions** inside the Coats facility.



AUTONOMOUS MATERIAL DELIVERY AT SCALE

The vehicle averages 230+ delivery missions per month, operating continuously to move components and retrieve empty containers from production stations.

Previously, these deliveries were handled manually using forklifts, carts, and manual tuggers. Today, the autonomous system performs the same work reliably throughout the day.



LABOR REDEPLOYMENT & FINANCIAL IMPACT

Before automation, internal material delivery required **about 1.5 full-time employees**. After deployment, those employees were redeployed to other production roles as the facility expanded, allowing Coats to absorb the workload without additional hires.

The company tracks capital investments for 12 months after deployment, measuring savings primarily through avoided labor costs. The project was approved with an expected payback period under two years, and internal tracking confirmed it was meeting those targets.



INCREASED ORGANIZATIONAL PRECISION

Operators adjusted workflows around the vehicle's predictable delivery schedule. The consistent cadence reduced variability on the production floor and simplified training for new employees.

Over its first year, the vehicle logged 1,845 hours of autonomous usage, traveling more than 1,800 kilometers inside the facility while supporting more reliable material flow.



"The tugger does exactly what you tell it to do, over and over again. That consistency helps people plan their work and know when materials will arrive."

— Stephen Finley
VP of Operations, Coats





THE DRIVEMOD TUGGER AUTOMATES THE WORK OF 1.5 FULL-TIME EMPLOYEES

THE DEPLOYMENT PROCESS

Deploying Cyngn's DriveMod Tugger at Coats involved a structured collaboration between the Coats operations team and Cyngn engineers.

1

Identify the automation opportunity.

Operations leadership identified internal material delivery as a strong candidate for automation. Material handlers were spending significant time transporting bins and components across the facility.

2

Design the delivery route.

Cyngn worked with plant leadership to design a tugger route connecting multiple workstations across the production floor. The final route incorporated 5–10 delivery stops, enabling materials to circulate through the facility on a consistent cycle.

3

Deploy and integrate the vehicle.

Cyngn engineers were present on-site during implementation to ensure the vehicle operated safely and reliably within the facility.

4

Train employees.

Operators interacting with the vehicle were trained on safe operation and workflow integration. Within months, the tugger became a routine part of daily production operations.

Coats tracks capital investments for 12 months following deployment, measuring savings primarily through avoided labor costs. The tugger project was approved with an expected payback period of under two years, and internal tracking confirmed the system was performing in line with those projections.



"I wish we'd found it sooner."

Cyngn's self-driving tugger was the perfect solution to support our strategy of advancing automation. Its high load capacity enables us to manage heavier components and bulk orders, driving greater efficiency, reducing costs, and accelerating delivery timelines.



"We definitely recommend Cyngn."

"Before adopting Cyngn's autonomous tugger, we relied on a substantial manual effort, about 200 forklift trips per week to handle pallet deliveries between two buildings. Now, we move four pallets at a time, a **4x increase in efficiency**, and our staff is freed up for more value-added processes."

Interested in Your Own Autonomous Tugger?

Cyngn can deploy autonomous tuggers at a variety of industrial environments and tailor their operation to your specific use case.

READY TO EXPLORE AUTONOMY? ►