Global Parcel Carrier Improves Conveyor Reliability with Predictive Maintenance

A global package delivery and logistics company operates approximately 800 **SEW-EURODRIVE K Series** helical-bevel gearmotors throughout one of its parcel distribution facilities. These drives power the conveyor systems that keep packages moving through the operation every day.

Because unexpected gearmotor failures can interrupt package flow and require emergency repairs, the customer wanted a way to identify developing mechanical issues before they resulted in unplanned downtime. The company partnered with SEW-EURODRIVE to implement a predictive maintenance program focused on its most critical conveyor assets.

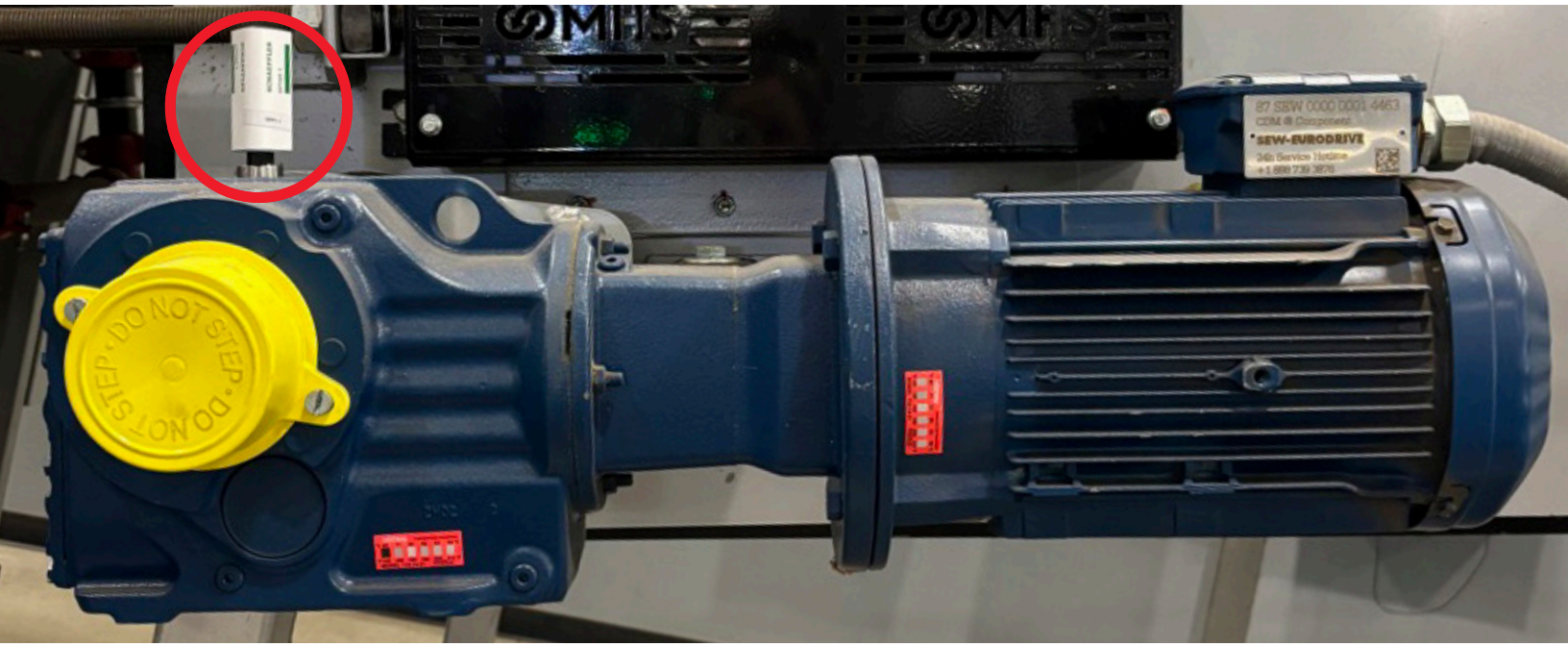
CLIENT PROFILE

Customer: Global Package Delivery and Logistics Company

Industry: Parcel & Logistics Distribution

Location: North Baltimore, Ohio, USA

Application: Parcel Sorting Conveyors

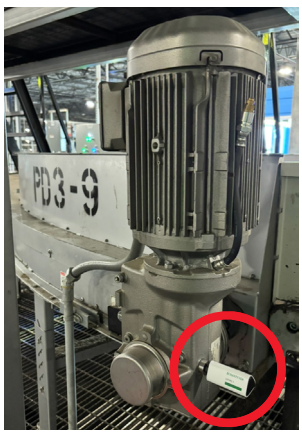


CHALLENGE: FINDING PROBLEMS BEFORE THEY CAUSE DOWNTIME

Some of the facility's most demanding conveyor applications, particularly power turn conveyors, operate under heavy loads and continuous use. These demanding conditions place significant stress on drivetrain components, making early detection of developing mechanical issues especially important.

Without condition monitoring, maintenance teams often don't know a gearmotor is developing a problem until it fails. The result is emergency repairs, unexpected downtime, and interruptions to package movement.

The facility needed a solution that could monitor the health of its most critical gearmotors and provide early warning before potential failures occurred.



K Series Gearmotor and Motor on a curved conveyor with sensor circled in red

SOLUTION: MONITORING THE EQUIPMENT THAT MATTERS MOST

SEW-EURODRIVE implemented DriveRadar® APPredict by installing wireless vibration and temperature sensors on 125 **K Series** gearmotors throughout the facility.

The project was completed in two phases:

- August 2025: Installed 50 wireless sensors and one cloud-connected gateway.
- September 2025: Installed 75 additional sensors and a second gateway.

Rather than monitoring every gearmotor, the customer selected the equipment most critical to its operation, including power turns, primary sorters, and other key conveyor applications.

The sensors continuously monitor vibration and temperature while the equipment is operating. If conditions begin to change, maintenance personnel receive an early warning that a gearmotor may be developing a mechanical issue. This allows repairs to be scheduled during planned maintenance windows instead of responding to unexpected equipment failures.





Schaeffler OPTIME 5 Sensor

> With DriveRadar monitoring our priority motors around the clock, we have greater confidence in the health of our equipment. The early warning notifications have allowed us to proactively address issues before they resulted in failures, helping us avoid unexpected conveyor downtime and maintain operational reliability.
>
> *- Plant Manager*

RESULTS: REPLACING EMERGENCY REPAIRS WITH PLANNED MAINTENANCE

DriveRadar® APPredict gave the user greater visibility into the health of its critical conveyor drives. By identifying developing issues before failure, maintenance teams were able to schedule corrective work during planned shutdowns rather than responding to unexpected failures during operating hours.

The project delivered measurable results:

- Installed 125 wireless condition monitoring sensors on critical K Series gearmotors
- Identified potential issues before drive failure, preventing breakdowns that disrupt processing up to 35,000 packages per hour
- Corrective maintenance could be completed during planned shutdowns.
- Expanded the successful deployment to an additional facility in California on 30 gearmotors.
- Positioned DriveRadar® APPredict for future deployment at additional facilities across the United States.

APPLICATIONS SUMMARY

Application Area	SEW-EURODRIVE Product(s)
K Series on Conveyor Turns	**KT39/T DRN100L4** • Motor power: 5 HP • Output speed [r/min]: 626 • Ratio: 2.81 • Output torque: 495 lb-in • Mounting position: M4AB
K Series on Sorters	**KH97 DRN180L4/TF** • Motor power: 30 HP • Output speed [r/min]: 129 • Ratio: 13.85 • Output torque: 14,400 lb-in • Mounting position: M4A
Condition Monitoring Software	**DriveRadar® APPredict**
Monitoring Hardware	**Schaeffler OPTIME 5 Sensor**

Scan Here
to Learn More

See How DriveRadar® APPredict Works

In this case, early warnings helped the maintenance team address developing issues on critical conveyor drives during planned shutdowns. Scan to learn how DriveRadar® APPredict monitors equipment and helps teams plan maintenance before a breakdown.

About SEW-EURODRIVE

For nearly 100 years, SEW-EURODRIVE has been a global driving force in machine automation, built on a heritage of innovation, unmatched engineering excellence, and a passionate commitment to serving customers.

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