



GETRAG-FORD Cuts Supplier In Hand Inventory From 7 Days To 2 Days – For Savings Of \$750K

Wireless Tracking Boosts Plant Productivity At Multiple Points

CHALLENGE: KEEPING TABS ON MILLIONS OF PARTS

At the GETRAG FORD Transmissions plant in Cologne, Germany, total production volume exceeds one million transmissions a year, with units shipped to car manufacturers in Argentina, China, Europe, Japan, South Africa, Taiwan, the Philippines and the U.S. The plant makes six varieties of transmissions for global automotive brands, including Ford, Mazda and Volvo.

Serving this broadly dispersed – and diverse – customer base requires the constant movement of many different parts to the assembly area. That movement must be well orchestrated to avoid the delays associated with excess movement, or the cost associated with storing excess work-in-process inventory.

OPERATIONS ‘LEANER THAN EVER BEFORE’

At the GETRAG FORD Transmissions plant in Cologne, Germany, Zebra’s Material Flow Wireless Parts Replenishment solution brings a sense of order to a complex manufacturing environment.

The solution at GETRAG FORD consists of 220 active RFID Zebra WhereCall buttons, each of which is associated with a specific part number and connected to a network of 12 wireless location sensors (antennas) for constant connection with the WhereCall buttons.

The company uses five ruggedized, mobile PCs mounted on forklifts for on-the-floor management. On the backend, the Material Flow Replenishment software application runs the entire application and gives the company the power to monitor operations in real-time.

The software application, which is available in 15 languages, runs in German at this facility. GETRAG FORD also adopted the Supplier Portal, so its suppliers can be promptly notified when they should deliver more parts to the plant.

When an assembly worker presses a WhereCall button to request parts, the exact time of the request is recorded and it is then prioritized according to the rules that GETRAG FORD established. When forklift drivers review requests, they are told exactly where to go to pick up the appropriate parts and exactly where to deliver them.

This setup helps maintain a synchronous flow of material across the GETRAG FORD supply chain, resulting in reduced inventory and higher productivity.

“We are operating leaner than ever before”, says Ralf Vierkotten, supervisor of Logistics and Material Handling, GETRAG FORD Transmissions. “Production-line employees no longer need to leave their workstations to help search for parts or to help material control determine the correct part; all they have to do is push a WhereCall active RFID button, and the system notifies all the required parties — from the line side to the forklift

Customer
GETRAG FORD

Industry
Automotive

Challenge
The plant needed to track and manage millions of parts more effectively, to reduce delays and inventory costs.

Zebra Solutions

- Zebra Material Flow Wireless Parts Replenishment
- Zebra WhereCall
- Supplier Portal

Results

- Reduced inventory carrying costs by \$750,000
- Labor productivity up 20%
- Equipment utilization up 30%
- One-third reduction in daily forklift trips
- Virtually eliminated line downtime due to parts shortages

driver to the internal warehouse – that more parts are needed. This ‘intelligent’ automated system supports our lean manufacturing processes as we benefit from real-time inventory consumption and can execute replenishment orders just in time.”

20% GREATER LABOR PRODUCTIVITY

Vierkotten says the Material Replenishment Flow solution has delivered significant benefits:

- Up to 20% improvement in labor productivity
- A one-third reduction in daily forklift trips

- A decrease in on-hand inventory from local suppliers from seven days to two days, resulting in a \$750,000 savings in inventory carrying costs
- Improved utilization of floor space for storing parts
- Better visibility of plant floor demand
- A near-complete elimination of downtime due to parts shortages

Based on the success of this initial implementation, GETRAG FORD Transmissions plans to expand the use of the Zebra Material Flow Wireless Parts Replenishment solution to other facilities.

About GETRAG-FORD Transmissions

GETRAG FORD Transmissions is a joint venture of GETRAG and Ford of Europe, which was founded in Cologne in 2001. As a full-service system supplier, the company specializes in the development and production of transmissions.

