



Whirlpool Plant Reduces Delivery Downtimes And Replenishment Cycles

Efficiency Up, Costs Down With Real-Time Plant Floor Visibility

CHALLENGE: GREATER VISIBILITY FOR HUNDREDS OF PARTS

Whirlpool Corporation, the world's leading manufacturer and marketer of major home appliances, manages hundreds of parts inside its manufacturing plant in Fort Smith, Arkansas.

The company needed real-time visibility into its operations in order to achieve several goals, including improving material replenishment response times, enhancing visibility to the plant floor, securing better historical data, and adding data and tools to improve problem solving. In addition, the company set out to improve its material movement process and overall operational efficiencies by keeping costs in-line, reducing delivery downtime, reducing replenishment time and improving equipment utilization.

A REAL-TIME VIEW OF THE PLANT FLOOR

After evaluating best-in-class wireless material flow solutions, Whirlpool Corporation selected Zebra's Material Flow Wireless Parts Replenishment because it was a proven system that met its needs.

Material Flow Wireless Parts Replenishment is a comprehensive enterprise execution management solution that streamlines the replenishment process, providing manufacturing operations with the ability to centrally manage and control supplier collaboration, internal supply and facility-wide

communication across multiple facilities or within a single location.

The solution enables customers to respond quickly to changes in inventory, production status and their customer requests by eliminating disjointed, labor-intensive processes and providing members of the supply chain access to actionable, real-time data from the factory floor to the internal and external supply. In addition, Material Flow seamlessly integrates with Enterprise Resource Planning systems (ERP) to further enhance operational efficiency.

Whirlpool deployed Material Flow within 45 days at the Fort Smith plant. Implementing Material Flow improved plant floor and network visibility and automated the material replenishment process. As a result, Whirlpool met its goals and realized numerous benefits.

GREATER EFFICIENCY THROUGH REAL-TIME VISIBILITY

With real-time visibility, the company improved labor and equipment efficiencies within the forklift delivery system. By creating "taxi-queues" based on prioritization of requests, Whirlpool improved line-side delivery efficiency. Additionally, the company increased visibility by enabling delivery operators to see replenishment requests more clearly.

Customer
Whirlpool

Industry
Manufacturing

Challenge
The company needed real-time visibility of hundreds of parts at its manufacturing plant.

Zebra Solutions
• Zebra Material Flow Application

Results

- Reduced costs and delivery downtime
- Improved material replenishment response time
- Increased equipment utilization
- Better plant floor visibility

IMPROVED REPORTING

Now, Whirlpool can generate reports on real-time and historical data, supporting problem solving and more-informed decisions. Reporting on accurate records allows the company to track statuses, requests, deliveries and operator functions.

REDUCED REPLENISHMENT DOWNTIME AND CYCLE TIMES

Whirlpool also reduced its delivery downtimes and replenishment cycle times. Now, delivery operators can clearly see replenishment requests and allow drivers to receive replenishment signals anywhere along their route.

About Whirlpool

Whirlpool Corporation is the world's leading manufacturer and marketer of major home appliances, with annual sales of approximately \$19 billion in 2011, 68,000 employees, and 66 manufacturing and technology research centers around the world. The company markets Whirlpool, Maytag, Kitchen Aid, Jenn-Air, Amana, Brastemp, Consul, Bauknecht and other major brand names to consumers in nearly every country around the world.

