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intermec solutions

RF BAR CODE SYSTEM LINKS WITH PLANT'S OVERHEAD CRANE TO QUICKLY MOVE PRODUCTS

METAL MANUFACTURER

UNITED STATES

industry

MANUFACTURING — METAL

applications

WORK-IN-PROCESS · SHIPPING/RECEIVING

situation

This manufacturer receives steel coils then galvanizes and coats them. The company's main manufacturing plant employs approximately 250 people.

critical issue

The company was losing valuable time as the coils moved from receiving to processing and then on to shipping. Most importantly, the firm's MIS department lacked shop floor station real-time information, which could have provided status updates to production managers.

reasons

In the crowded and busy receiving, processing, and shipping areas the metal coils were often shifted and misplaced. For example, after galvanization, the finished coil product would be marked with a wax crayon on the outside, and then sent via forklift or crane to inventory or a holding area. Coil movements were ostensibly tracked by paperwork, but a forklift operator might move coils A and B in order to maneuver his forklift to access Coil C, with no tracking of the shifts to A and B. Consequently, if another forklift or crane operator went looking for coil A or B later that day, he would be unable to find them quickly (or not at all). All told, the plant handles between 300 to 400 steel coils at any given point in time.

vision & capabilities

The company wanted to develop a real-time data collection system that would provide tracking of all coils at each stage within the plant. Also, they wanted the system to interface with the plant's overhead crane so that the crane would be efficiently and intelligently positioned overhead of coordinates on the floor for a respective coil. For example, a picking order for a crane operator to fetch Coil A would also tell the crane to move to east 20/north 85 so that it would be directly positioned overhead for rapid lifting and moving of the coil on the 1,600 square foot receiving floor.

intermec solution

Intermec equipped the plant with a complete line of radio frequency (RF) bar code data collection equipment which interfaces with a laser distance meter on the overhead crane. Intermec's JANUS™ J2050 Vehicle Mount Units are used on the forklifts and crane; JANUS™ JR2020 Hand Held Computers are used on the floor; MODEL 3400 Direct Thermal/Thermal Transfer Bar Code Printers provide the required bar code labels for the coils; and the Intermec 9512 Transaction Manager and 9189 RF Gateway provide the intelligence and link-up to the X,Y laser coordinate meter.

benefits

The company is able to move steel coils more efficiently through receiving and processing, and plans to extend the wireless system to its shipping area. The new system allows the company to galvanize and coat more coils in less time.

Intermec