



## RADIO FREQUENCY BAR CODE SYSTEM ACCELERATES PRODUCTION OF CUSTOM-BUILT FORKLIFTS

MITSUBISHI CATERPILLAR FORKLIFT CORPORATION (MCFA)

HOUSTON, TEXAS



**industry**

MANUFACTURING – HEAVY EQUIPMENT

**applications**

LABOR TRACKING • TIME AND ATTENDANCE • WORK-IN-PROCESS

**situation**

When Mitsubishi and Caterpillar entered into a joint venture to form Mitsubishi Caterpillar Forklift America, Inc. in Houston, Texas, the facility had the capacity to custom-build as many as 60 forklifts in one day. Typically, assemblers do not know what type of forklift they will be working on until the next work order is received.

**critical issue**

The consolidation of Mitsubishi and Caterpillar doubled the workforce overnight at the Houston site, and dramatically increased the number of units produced at the plant. As a result, the joint venture put enormous pressure on the plant's work-in-process and employee attendance systems.

**reasons**

All work-in-process and employee attendance tracking was done manually, and as a result, delays between transactions and data entry made it difficult to track the manufacturing process, accurately forecast production, or adjust for delays. MCFA builds many types of forklifts, not just one standard model. Customers may opt for a gas-powered, electric or diesel engine; or choose from pneumatic or cushioned tires. Consequently, any delay in getting the required parts to assemblers for each custom-built order results in slower production times.

MCFA's problem was that when parts came to MCFA's receiving dock, several days might elapse before the shipment was entered into MCFA's computer system. The resulting lag created a problem if pick orders transported the parts to the assembly line and workers tried to use them before part numbers had been entered into the computer.

**vision & capabilities**

MCFA wanted to automate all employee time and attendance records and improve the work-in-process system. The company wanted to be able to provide progress reports in order to accurately inform customers about the status of a given job.

**intermec solution**

In working with Intermec business partner SE Technologies, MCFA decided to use both portable wireless and fixed-station terminals to monitor manufacturing, shipping, receiving and distribution processes throughout the Houston plant. The facility is using five MODEL 1545 Laser Scanners, nine MODEL 9550 Bar Code Transaction Managers, a MODEL 3400 Direct Thermal/Thermal Transfer Bar Code Printer, and three MODEL 9560 Industrial Transaction Managers.

**benefits**

MCFA is now able to track work orders on the assembly line through each stage, and provide customers with periodic information about work-in-progress. Additionally, the new Intermec system has allowed management to smoothly handle the influx of new employees at the Houston site. Finally, MCFA finds that work proceeds more efficiently, with fewer delays.