success*story*

i n t e r m e c s o l u t i o n s

RFDC IMPROVES PLANT OPERATIONS

NCR CORPORATION
COLUMBIA, SOUTH CAROLINA

industry
MANUFACTURING — ELECTRONICS

applications
SHIPPING/RECEIVING · WORK-IN-PROCESS

situation
In addition to its well-known lines of cash registers and automatic teller machines, NCR also manufactures a wide range of computer servers that support computer networks and databases for retail, finance and communications applications. NCR's server assembly plant in Columbia, South Carolina ships 80 to 100 servers per day, and employs 300 people.

critical issue
NCR wanted to improve manufacturing efficiencies related to their assembly processes. During the course of each day, the plant receives a steady stream of printed circuit boards, disk drives, power supplies and cabinets that are then assembled into finished servers. NCR required tracking of each individual part, however and management believed too much time was wasted due to its cumbersome and inefficient system associated with tracking these parts.

reasons
NCR had been using a manual, paper-based system that required great attention to detail on the part of their employees. For example, when using this system to track parts, workers were required to accurately write a 14-digit part number, an 11-digit serial number or a 17-digit carton number on a sheet of paper, find a computer terminal, and then key in the information. Obviously, there was major room for worker efficiency gains if this process could be streamlined.

vision & capabilities
Above all, management wanted to eliminate the cumbersome process of writing down and then data entering very long part numbers. Instead of writing down the information, a bar code label detailing the appropriate part number, serial number and work order number would be affixed to each printed circuit board, disk drive or other part. These labels could then be scanned and verified at key points in the receiving, assembly and shipping process. When NCR first moved to replace several legacy systems with Oracle, they knew they would have to include data capture in their plans. NCR realized they had to scan data into the Oracle database for better integrity and performance.

intermec solution
Intermec's partner, Connectware Solutions of Montreal, Quebec (Canada), equipped the Columbia plant with a radio frequency (RF) bar code data collection system. The plant uses 20 Intermec 900 MHZ JANUS™ JR2020 Hand Held Computers with built-in scanners that are linked to a 9181 Base Station Receiver and 9180 Network Controller wired to their local area network. In addition, each label is scanned when that unit reaches the beginning of Work-in-Process (WIP), the end of WIP, and testing. The Oracle software automatically tracks each item through assembly and testing, until it comes to rest in a finished server on the shipping dock.

benefits
NCR has gained efficiency in its assembly operations, and management now has access to real-time information that allows them to have up-to-date status reports on plant operations. NCR is so pleased with the results that the company plans to install similar systems at other server manufacturing plants located in Dublin, Ireland; Dundee, Scotland; and Waterloo, Ontario in Canada.

Intermec