

Radio days

With MIT and Wal-Mart leading the way in RFID technology, vendors and manufacturers may have to tune in or drop out. **By Kim Palmer**

New technology for the manufacturing industry is often a double-edged sword. Although technology advances can lead to increases in productivity and lower costs, process implementations and retraining are expensive.

But for some manufacturers, integrating certain technology — such as Radio Frequency Identification (RFID) — is no longer a question of if but of when. With RFID, manufacturers can embed tags in or on products to better track their movement through the supply chain. Tags respond with identification information when radio waves are sent from readers in a store or warehouse. “It’s like having a chip attached to every unit of product,” says Rebecca Morgan, president of Fulcrum Consulting, a manufacturing consulting firm. “It adds data ... it’s more than just a serial number. Everything a manufacturer makes will be tracked and traceable for its entire life.”

Unlike bar codes, which are identical on every unit of the same product, the RFID number is typically unique to each unit or component. And RFID transmitters don’t need to be in the line of sight like bar codes do; data on inventory can be read as long as it falls within the antenna’s reach.

Businesses are using the technology to achieve cost reductions from better inventory control — less lost and misplaced product — and reductions in labor. Although the technology is relatively new and costly, many manufacturers will not be able to wait to adopt it.

“Wal-Mart announced that its top 100 vendors will have to have this in place by 2005,” says Morgan. “Target, Kmart and Sears will do it because they have to, to compete. This will completely change distribution and how manufacturers get things from point A to point B.”

Supply chain failures cost global retailers billions of dollars a year, and no one is affected more than big box retailers. And because of their size, what these companies want, they get, leaving retail manufacturers to figure out how to pay for it.

“One problem is that most manufacturers are already so behind the curve,” says Morgan. “They will most likely try to wait until the technology matures. This is going to be another challenge for the smaller manufacturers,” which face a big cost outlay to replace the traditional UPC shipping process that, for some, consists

of a scanner and a printer for labels.

RFID technology will have to be integrated into the entire manufacturing process and include software to store the data.

“There will have to be a rethinking of the way you define space,” says Morgan. “Companies will have to replace old equipment, change processes and procedures, and, of course, there will be training.” **HOW TO REACH:** Fulcrum Consultant Works Inc, (216) 486-9570 or www.fulcrumcwi.com



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