

Brooks Focuses on RFID Apps

Manufacturing systems provider Brooks Automation creates a new division to develop real-time production and supply chain applications for a range of industries.

By Jonathan Collins

Aug. 31, 2004—Manufacturing systems provider Brooks Automation is looking to leverage its existing RFID products and deployment experience to provide an array of companies with a way to automate their manufacturing and supply chain operations by being able to act on RFID-created data in real-time. The company believes it already has the applications to enable real-time manufacturing and supply chain execution automation, but to better market and develop its software, it has formed a new division, Brooks Software, and brought its software products together under its SenseDecideRespond real-time manufacturing applications banner.

According to the company, its SenseDecideRespond applications provide a software architecture that can connect to RFID networks at one end and enterprise resource planning (ERP) systems at the other to enable companies to immediately act on information collected by the RFID readers. Brooks's customers include Honeywell and disk drive manufacturer Seagate, but the bulk of its customers are semiconductor manufacturers. The company, however, maintains that its applications can be used by manufacturers in any industry.

“A lot of manufacturers are going to be dealing with real-time data for the first time, and they have to have a way to deal with that,” Joe Bellini, senior vice president of Brooks Software. “Most manufacturing systems run on a single standalone database. We can revamp that architecture so that that data connects into back-end services such as SAP.”

Brooks already offers RFID tracking systems to its customers in a package that has included software applications such as Brooks supply chain management and Brooks decision-making solutions that are preintegrated with Brooks RFID readers. In 2002, Brooks Automation acquired RFID system maker Hermos Informatik from the Hermos Group for \$41 million. Hermos's CarMaS RFID tags, readers and accessories have been targeted at the semiconductor industry. Through its Hermos division, Brooks offers low-frequency and high-frequency RFID systems, as well as a custom design service to fit implementations to customer requirements.

“We already have a \$25 million RFID business,” says Bellini, adding that with \$30 million to invest in R&D, Brooks Software expects to make significant investment in developing its Manufacturing Execution System (MES) offering, which is currently designed for use in semiconductor manufacturing, for applications in other industries. MES is a factory floor information and communication system for enabling resource allocation, detailed scheduling, document control, data collection and acquisition, labor management, quality management, process management, maintenance management, order tracking and performance analysis. By linking its MES application to an RFID network, Brooks Software can bring the ability to tie this functionality with real-time, automatically generated data.

But Brooks's biggest competitive advantage, according to the company, is experience with deploying real-time dispatcher applications. "We own nearly 100 percent of the real-time dispatcher application market for semiconductor companies," says Bellini.

Brooks' real-time dispatcher application automates how product lots move through semiconductor plants. It does this by making the routing and timing decisions of those movements based on business rules and policies configured to the application along with information drawn from a temporal data repository. Temporal data is information that changes over time, such as a tagged item's location.

"If you look at the EPCglobal RFID specifications, you will see an application layer called the temporal repository with a workflow manager sitting above it. This is where our real-time dispatcher application fits, and it represents an emerging and growing software category. As far as I know, we are the only game in town right now at this tier in the architecture," says Bellini.

The technical experience that Brooks has gained in that market, the company believes, can be carried over to track production and supply chain operations in other industries.

Brooks sells its offerings directly, as well as through system integrators. Its new software division has also established vertical industry practices in order to target its systems to markets including aerospace and defense, automotive, high tech, medical device and semiconductor industries.

[RFID Journal Home](#)

Copyright ©2005 RFID Journal, Inc. All Rights Reserved