

## Field Inspection Solution Improves Safety, Brings In New Business

By Teresa von Fuchs



Halo is a New Orleans-based supplier of wire rope and rigging hardware to the marine, industrial and construction industries.

The company also provides testing, inspection and certification services for products currently in use in the field. Halo wanted to improve the testing and certification process by using RFID tags to promote transparency and traceability.

In a business where safety literally hangs in the balance, ease of inspection shouldn't be the deciding factor between life and death.

As it is with many service industries, rigging certification was mostly a pen-and-paper affair, while computers were in use to help test equipment; notes from those tests were handwritten by inspectors in paper test logs.

"Field records were messy," says Tyrus Smith, Business Development Specialist with Halo. "These aren't sterile areas we do the testing in. The reports would be dirty and hard to read, and we'd have to rewrite them once we got back to the shop."

Once the field notes were rewritten and submitted by inspectors to the office, customer safety certificates were created and filed away. When a customer needed a copy, "Even if it was a Sunday, someone would have to go to the office, find the most recent certificate in the files and somehow get it to the oil rig in Dubai that called for it," says Smith.

Smith was working on the testing computers at Halo when Ken Ragusa, the company's President, asked if he could help implement RFID tags and scanning into the testing process. Smith jumped at the chance. "The rigging industry doesn't use computers to its full advantage right now," he says. "We wanted to be the first [company] to use a Web-based tracking system to keep track of our customers' certificates."

The Web-based system was created by Canadian hosted solution supplier N4 Systems. N4's Field ID product provides automated inspection and safety compliance management software. Field ID works in conjunction with RFID tags and handheld mobile computers to track and input inspection data.

N4 worked with Halo to implement an RFID-based system that automates its inspection procedures, while providing better visibility into the process by creating Web-based certificates for customers.

Now, when Halo's inspectors go out into the field, instead of carrying a paper test book, they have a PsionTeklogix Workabout Pro G2 rugged mobile computer.

An inspector uses the G2 to scan an item's RFID tag. The corresponding test data form loads automatically on the screen. Field ID also allows inspectors to see past inspection records, and RFID tags help keep track of the multiple components involved on each job site.

"RFID works similar to the way a barcode works to track unique products. Slings, mooring gear, or any hardware that's used to lift items or moor them to the ground needs to be tested," says Smith. "On just one rig there might be 10 different winches, and each part on each winch needs to be inspected, tested and that data has to be recorded. Plus all the ropes. We check every 10 feet of line and every 50 links of chain. All these things need to be tested annually or even twice a year."

Before inspectors go out on a job they sync up the G2s with a list of all the items that they need to be tested for each customer. When all the inspection data has been recorded, inspectors sync the handheld back to the Web interface using a docking station or a wireless card.

All the inspection data is uploaded automatically, and certificates are ready for customers almost immediately. Customers can download copies of any inspection data they might need from any Web-enabled device. "If you can check your Gmail account, you can get copies of your certificates," says Smith.

The software also alerts Halo and its customers when it's time for the next inspection. "Halo's focus on safety accentuates the benefits and features of Field ID," says Somen Mondal, president and CEO of N4 Systems, "Halo is a great example of how Field ID is helping create safer workplaces."

Because the testing and inspection processes weren't easy to track and record keeping wasn't very up-to-date, Smith said the government was sometimes lax on enforcing inspection requirements.

"But now that our customers see what we're doing, they've been asking for this kind of easy-to-access testing and maintenance info."

And word about the efficiency of its RFID system is starting to spread: Halo Testing Services has been getting calls from customers that didn't originally buy products from Halo but now want them to take over the testing and inspection process. Which is why Halo retrofits products it didn't fabricate with RFID tags, and tries to ensure that, should an accident occur, the RFID tag on the item that failed will remain intact.

Smith estimates it took less than two months to achieve a full return on investment, based on the time saved performing inspections and the ease of customer access to certificates. Such gains in efficiency were just a step toward a broad purpose: "We wanted to raise the bar from Safety First to Life First," says Smith. "Our motto used to be fast turnaround, great service and great products. All that's true still, but we're setting the industry standard for more than just safety, we're dedicated to Life First."

And that's an investment that's hard to put a price on.