

At a Canadian Trailer Dealership, RFID Has Paid for Itself

Action Trailer Sales is saving money by using active tags to more easily find the trailers it rents and sells and to keep more accurate inventory records.

By Claire Swedberg

May 14, 2007—Utility trailer dealership Action Trailer Sales' RFID system, which helps track and locate more than 1,000 trailers on four lots spanning 25 acres in Mississauga, Ontario, has already generated a return on its investment. The active RFID tags, which are affixed to the fronts of 48-foot-long and 53-foot-long trailers, help the dealership more easily locate the trailers and more accurately document inventory, thus reducing errors and labor costs. The company intends to expand its RFID system to its Montreal facility—Action Utility Quebec—in the near future.

Installed in September 2006, the RFID system uses active 433 MHz tags and readers from Wavetrend and has helped Action Trailer reduce inventory errors, says Paul Sadler, IT manager at Action Trailer Sales, which provides new and used trailers, rentals, leasing, service and parts to the trucking industry.

Prior to the RFID deployment, personnel walked up and down the aisles of trailers each day with a clipboard and pencil writing down the ID numbers printed on the trailers. Sometimes they wrote down incorrect numbers or didn't record them at all, and those errors made it hard to find trailers when they were needed. Sadler says he considered bar-code solutions but expected that dirt and ice would build up on the bar-code labels and make them unreadable.

That decision was based on seeing the trailers in the winter, "with trails of ice coming down the front of them," Sadler says. "We also didn't want to have to pause at each trailer when reading [the labels]," which would be necessary with a bar-code scanner. Using an RFID interrogator, employees can read the tags from a distance of up to 30 feet or more as they walk through the rows of trailers, he says. And the process takes about half the time previously spent handwriting the ID number on each trailer.

Action Trailer Sales uses a Wavetrend tag programming device attached to a PC to encode each tag with a unique ID number that is associated with a specific trailer. "We can reprogram and reuse a tag once a trailer is sold," Sadler says. The rental vans have tags in plastic, weatherproof boxes screwed onto them, while the trailers for sale have tags inserted in plastic holders that attach to air hoses or other nonmetallic objects. These tags are removed when the trailers are sold.

Personnel use a handheld Psion Teklogix reader that captures the ID number of each tag in the yard and stores that data by the order in which the tags are read. When an employee returns to the office, he downloads data from the reader to the computer desktop using Windows-based software provided by R. Moroz Ltd., directly into a Microsoft Excel program from which a "yard sheet" (similar to a spreadsheet) is created, displaying where the trailers are located in the yard.

In the future, the company intends to create a Web site where data can be shared with—for example—sales staff who can log on for an update as to where a specific trailer is or whether it is ready to be rented or sold, Sadler says.

RELATED_ARTICLES Sadler declined to disclose the cost of the RFID solution, but says the return on investment is there in each avoided mistake. "I'd say it has paid for itself and will continue to pay for itself. You can't have one in 1,000 trailers missing, because, guess what? That'll be the one you need now," Sadler says.

There were some early difficulties with the placement of the tags and RF interference from all the metal in the environment, he says. Read rates are best when the tags are attached on an angled portion of the trailer in the front, Sadler says. Also, the tags' read range has occasionally proven to be too long, and sometimes tags on trailers in the next row are read. "We are still tweaking that," Sadler says.

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