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Bairstow Tags Rigging Products

Topics/Verticals: IT/Infrastructure, Asset Tracking, Manufacturing, Labeling

The company has begun tagging rigging and other fall-protection equipment requiring inspections, thereby allowing its customers to use RFID to track items electronically.

By Claire Swedberg

Feb. 16, 2010—Predicting an increasing demand for RFID technology to track inspections and safety data related to custom rigging supplies and fall-protection equipment, manufacturer and supplier Bairstow Lifting Products Co. has begun tagging every item it manufactures that requires labeling—that is, goods that must be periodically inspected. Putting RFID tags on every labeled device, says Carey Hanson, Bairstow's sales manager, enables the company's customers to begin tracking the equipment it receives for inventory purposes, as well as for maintaining an electronic record of all items it inspects. Bairstow is also offering to tag items already purchased by its customers, as well as equipment it sells that is manufactured by other companies.

Bairstow sells everything from wire rope slings to safety harnesses and lanyards. Overhead lifting equipment requires safety inspections, and Bairstow provides a printed label on each of those items as well. The RFID tags, made with UPM Raflatac's MiniTrack RFID inlays, are being offered in two options provided by label manufacturer Marnlen RFID. One tag is designed to be attached to metal, while the other is meant for products composed of non-metal synthetic materials. Each high-frequency (HF) 13.56 MHz RFID tag complying with the ISO 15693 standard will store a unique ID number.

For a product made of non-metallic materials, Bairstow stitches a passive RFID tag directly onto its surface.

The company was motivated to offer this solution, Hanson says, by witnessing how RFID systems are being used, in some cases, to ensure devices are inspected regularly. Although none of its customers requested such a solution, he says he spoke with several of his largest clients regarding the firm's RFID labeling plans, and they showed an interest in adopting the technology. That was enough to motivate the addition of RFID that, he hopes, will provide a valuable tool that Bairstow's competitors do not offer.

Safety inspectors and product-management companies of such equipment as slings and harnesses have begun adopting RFID technology. Elko Wire & Mining Supply and Hercules SLR, for instance, are each utilizing a system from N4 Systems (see Equipment Inspectors Find Safety in RFID). Jergens, based in Cleveland, also began providing N4 Systems' RFID tags to products that connect slings or chains (see Hoist-Ring Manufacturer Using RFID to Carry Life-Cycle Data). And safety-equipment manufacturer MSA has also begun offering a full RFID technology solution to its customers—N4 Systems' Field ID online inspection and safety compliance management system, integrated into a full-body harness known as EvoTech. MSA's clients would purchase the harness with built-in RFID tags, and could then track it using Field ID Web-based software and handheld interrogators.

Bairstow now hopes that adding RFID tags to its own products will make the firm more competitive as RFID technology becomes more prevalent. "We are the only sling company offering this on all our tagged lifting slings," Hanson says. "Our option was meant to not limit which items did or did not get RFID, but to find a cost-effective option, which would put this technology into every item."

Bairstow, Hanson says, does not intend to be a full-service RFID technology provider (selling readers and software packages with its tags), but if customers request handheld interrogators to read tags attached to the safety equipment, the company will offer to sell such devices from a variety of manufacturers, and can also help them acquire software systems to translate and store information from the readers.

Growing demands from the Occupational Safety and Health Administration (OSHA) and other agencies mean users must not only inspect safety equipment regularly, but also provide easily accessible records of those inspections. "We were looking at what were more efficient ways for them to do that," Hanson says.

Bairstow manufactures its products in Atlanta, which is where the RFID tags are being attached. The tags are enclosed in a heavy plastic film designed to help them withstand shock, sunlight, and high and low temperatures and moisture, says Rod Coward, Marnlen's manager of new product development. Each tag has the Bairstow name printed on the front, along with its batch number, serial number and unique ID number encoded to the RFID chip's memory.

The non-metal version—designed for use on synthetic materials such as polyester, nylon and rope—is attached to the back of Bairstow's products via adhesive, and is then stitched on. The tag for metal products includes a layer of proprietary RF-absorbing material, Coward says, in order to separate the RFID inlay from the metal on which it is then attached. The tag is attached to the item with a length of

wire cable, crimped to create a circular metal band.

"We realize most customers still have no idea about RFID technology, or maybe don't care yet," Hanson says, "but inspections are becoming more prevalent." The need to inspect more often and provide more records, he says, is pushing many equipment users to seek a better solution than manual record-keeping using pen and paper. Companies looking into RFID, Hanson notes, have found that to attach tags to their products would cost, on average, $10 to $15 per tag. Bairstow, on the other hand, provides those tags already attached to the equipment, for what he calls "a nominal price increase."

For those who want to add tags to their products, Bairstow can sell them the tags at $2.50 apiece for non-metal items, and $6.50 each for the metal versions. That price, according to Hanson, would drop with purchases at larger volumes. "The point isn't for us to make a fortune," he says. "It's to offer a higher-quality product"—that is, one that can be tracked via RFID.

Bairstow tested its RFID tags using software and handheld readers provided by one of its rigging products suppliers, The Crosby Group, a Tulsa, Okla., company that employs RFID technology for some of the items it produces. The Bairstow RFID tags, Hanson says, can be read with any HF interrogator that supports the ISO 15693 standard, and could be used in a variety of ways.