RFID Gives a Lift to Crane Accuracy

Editor's Note: Today's top story is the recently-debuted RFID Crane Locator Solution, which combines a passive UHF reader embedded in the hook of an industrial crane with a laser range finder to help operators locate and identify bulky look-alike goods such as steel coils and paper rolls.

By John Burnell

A new system that combines passive RFID reading and a laser range finder helps industrial crane operators accurately identify hard-to-reach, look-alike items. The new RFID Crane Locator System from Cleveland-based SPEDE Technologies features a Gen2 passive RFID reader integrated in the hook of the crane. The RFID reader identifies tagged items as they are being hoisted. A positive reading triggers a laser range finder, which calculates the X-Y coordinates of where the tagged object is placed. The coordinates and identification data are married in a database to accurately record the item's putaway location.

The system was developed for a company that had problems locating individual coils of steel, SPEDE Technologies president Bob Bunsey told RFID Update. Although the coils are very large and aren't frequently moved within a facility, keeping track of them is difficult because individual coils are difficult to tell apart and ID markings can be hard to access. The crane-based RFID system proved to be successful, and now SPEDE is marketing it to other companies. It can be used to identify and track steel, paper rolls, and many other bulky objects. SPEDE announced the system at the NA 2008 materials handling show held last week in Cleveland.

Bunsey said despite potential interference from metal crane parts and steel coils, the system attains accurate RFID reads through careful tag placement. Using passive RFID and commercial lasers results in lower implementation costs that an active RFID-based real time locating system (RTLS) would require, according to Bunsey.

The system can also direct other wireless devices. For example, the action of picking a roll for shipment could direct a printer to automatically create a bar code or RFID shipping label. Software developed by SPEDE provides a variety of receiving, inventory control, database, picking, and shipping functions.

RFID capabilities have been integrated into other material handling systems (see *RFID Blooms for Dutch Flower Tracking* for an example), but this is believed to be the first system with an RFID reader in the head of a crane. Multiple RFID and material handling companies market forklift-based RFID systems.

See SPEDE's announcement of the new RFID industrial crane system.