

Torrington Company

Client Overview

Torrington Company, a subsidiary of Ingersoll Rand, is a leading manufacturer and supplier of a broad line of precision bearings for the original equipment manufacturer (OEM) and maintenance, repair, and operation (MRO) markets. Its 77,000-square-foot central distribution center (CDC) is located in Duncan, South Carolina.

The Challenge

The Duncan CDC is the hub of Torrington's North American distribution network. Torrington manufacturing plants continually ship in bearing products. The CDC stores or ships them as required.

Customer satisfaction is a key element in Torrington's strong market position. Since the bearing industry serves diverse markets, many customer service criteria are evaluated. Torrington determined that the CDC's labor productivity was above industry norms, however, other areas at the facility were identified for improvement. These improvements would achieve higher overall standards and customer satisfaction.

Torrington used an in-house designed warehousing system that depended totally on a mainframe computer at company headquarters in Torrington, Connecticut. Drawbacks of this system included inadequate control over storage, bin allocation, and inventory turnover. There were limits on the mainframe's capability to provide constant updates as well. From 10 pm to 6 am, EST, the mainframe did routine batch data processing for other corporate activities and was unavailable to the CDC. This time gap created delays in receiving and storing shipments.

Tompkins Associates was involved in the conceptualization, evaluation, and implementation phases of the Torrington CDC project. The project team:

- Challenged existing warehouse methodologies and implemented changes
- Developed functional bid specifications for a fully functional Warehouse Management System (WMS)
- Led bid solicitation efforts and selected the best vendor based on price and performance
- Participated in detailed planning strategies including pilot operational configuration
- Led acceptance testing procedures for all facets of the system
- Assisted in training and implementation support

continued on back

The Solution

Tompkins always looks to long-term solutions to ensure that a client's operations run smoothly for an extended planning horizon. For Torrington Company, this meant the selection and implementation of the WMS and its testing. The Torrington CDC was equipped with not only a new WMS by Haushahn Engineering, but also advanced material handling equipment, radio frequency (RF) data communications, bar code scanning systems, and other peripherals. Tompkins also recommended that the CDC's picking scheme be altered to reflect product velocity.

Torrington Company implemented the following solutions in order to enhance operations:

- A zone random storage algorithm for organizing product by popularity and size
- Narrow-aisle, wire-guided order picking trucks that pick from preset zones and are linked to the WMS through RF data communication
- A barcode system that identifies all necessary information about the contents of a container, so as to facilitate consolidation and order packing
- A robust, integrated WMS that ties together many of the CDC functions

The Results

The results of the new WMS and new technologies were evident and impressive. On a daily basis, the newly revitalized CDC smoothly handled truckloads of incoming bearings.

Stockpicking productivity increased by more than 20 percent. Manual data entry transactions decreased by 75 percent. Order accuracy climbed to more than 99.5 percent. The new electronic systems generated minimal paperwork. The bottom line benefits include quicker response times to customers and more accurate and continuous tracking of order information.

The new paperless system helps Torrington with guaranteed immediate shipments, making the company responsive to changing order requirements.