Fast, Accurate Industrial Readers Drive Activities at T.U.Distribution Centers - Datalogic

The Dutch company T.U. supplies government agencies along with many other vertical markets with products and services. Because of the speed involved with 64 working stations, they needed an industrial cordless scanner to keep up with the fast-paced...

Datalogic's PowerScan™ PM8300 Cordless Laser Readers Facilitate the Quick Movement of Goods Through T.U.'s Distribution Cycle

Overview

Established in 1880, the Dutch company Technische Unie (T.U.) and its 35 sales offices and 2 warehouses became part of the international company Sonepar in 2000. Technische Unie supplies government, technical, manufacturing, commercial and residential construction companies with products and services. The company has built a reputation on the quality of its services and the reliability of its distribution centers (DCs).

Located in the city of Alphen aan den Rijn in the Netherlands, one of T.U.'s distribution centers houses various small-sized components and cables. The wholesaler offers over 200,000 references in their catalog and more than 90,000 items are stored in this warehouse.

T.U.'s warehouse outputs an average of 60,000 order line items per day and has the capabilities to receive 100 to 125 trucks every working day at its doors with incoming merchandise. To meet these demands and to avoid frequent bottlenecks in the picking process, a fast and robust scanning system is required.

The Challenge

With their printed picking lists, the employees collect the goods according to the item group. They are then placed into grey trays and transported over the conveyor belts to one of the 64 working stations at the end of the sorting line.

For inbound, storage and order picking tasks, all the scanners – at the 14 repacking stations and at the 64 working stations – are used intensively because of an ongoing transport process.

For example, the 64 scanners at the working stations complete 180,000 scans a day (2,800 scans / scanner / day, which means about 175 scans / hour / employee). Clearly, the scanning process is very fast and the employees are trained for this activity, which leads to a high level of efficiency in order picking as well as inbound registration. With this speed in mind, T.U. needed a scanner that would

easily adapt to this incredible pace.

The Solution

T.U. selected Datalogic's PowerScan™ PM8300 cordless readers for their DC activities because the reader met all demands concerning reliability, durability, operational use (at least 16 hours a day in two shifts), ergonomics and intuitive use by T.U. employees. High volume scanning is very demanding on the internal working components of the scanners, such as the mirrors, the scan engine and the much-used trigger; therefore, T.U. required a robust device like the PowerScan PM8300 industrial reader.

To meet T.U.'s specific needs, Datalogic offered an bar code reading solution with strengthened triggers. For instance, the PowerScan 8000 series of readers can withstand more than 10 million hits and the new Lithium Ion battery operates for at least 16 hours without recharging.

In Alphen aan den Rijn, all wireless bar code scanners communicate seamlessly with the host computer and terminals at working stations using Datalogic's STAR Cordless System™. The system operates as a 433 MHz Narrow Band system, completely free of interference. It operates in an area of 100,000 square meters, covered with various access points. All scans are transferred in real-time to the back office system.

The outstanding optics of the PowerScan 8000 series scanners automatically adjusts reading distances from contact up to 1.0 m / 3.3 ft. In addition, Datalogic's distinctive 3GL™ (Three Green Lights) technology provides good-read feedback to operators in dimly lit or noisy environments. These features along with the extreme robust qualities of the PowerScan PM8300 reader were key decision factors in T.U.'s selection process.

The Results

The PowerScan PM8300 readers are used for inbound and picking processes. All newly received goods are removed from their pallets and boxes and moved to the 14 receiving workstations. The items' bar codes are scanned and the data is sent to the back office system. This enables T.U. to know if the items received correspond to the items purchased.

Matching items are put in transport trays, placed on conveyor belts and moved to storage locations. The back office system database tracks how many articles are stored at any location.

As sorting employees scan article bar codes and location bar codes, picking information is then sent to the back office system. The system then "knows" which location is empty or has less stock. This management information is also reported to the salespeople and purchasers.

Bar code scanning also controls and steers the conveyor belts – tracking all articles on their routing through the warehouse to the working stations. For this omnidirectional scanning, fixed mounted bar code scanners from Datalogic Automation are in place above the belts. These scanners read the bar codes, which enables the back office system to indicate the working station destination.

When a grey tray is received at a working station, the article bar code is first scanned to check if this item should be there. Then, the display placed at the working station, which is linked to the database and host computer via radio system, shows in which tray the item should be placed. The employee at this working station scans several codes (item code, customer's tray code, again item code for checking and tray location code). All this must be done quickly and faultlessly.

For inbound operations, the scanners are used for item and grey tray identification. For storage operations, they are used for the pallet bar code and the storage location bar code reading. For picking operations, these codes are scanned and, at the working station, there is a triple scan: green tray storage location, grey tray identification and item identification.

Customer

Technische Unie

Industry

Transportation & Logistics

Sub-Industry

Distribution Centers

Application

Warehouse Management

Country

The Netherlands

Datalogic Products

PowerScan™ PM8300