ROLD SKOV SAWMILL USES ZEBRA WIRELESS AND BAR CODE SCANNERS TO GIVE REAL-TIME TRACEABILITY OF TIMBER STOCK

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> – Søren Krogstrup, acting production manager at Rold Skov Sawmill

THE COMPANY: ROLD SKOV SAWMILL

Rold Skov Sawmill cuts up soft wood for the building sector. The product range includes wood for construction, sheathing, packaging, heat-treated wood, bark and wood chips. The customers come from throughout Europe and are primarily timber merchants and DIY centres. The public limited company, Rold Skov Sawmill, which comprises two sawmill units in Arden and Sabro, is one of Denmark's largest soft wood sawmills. Rold Skov Sawmill belongs under A/S Lindenborg Gods, which in terms of acreage is one of Denmark's largest country estates.

The challenge: High stacks of wet wood and uneven earth tracks

In recent years Rold Skov Sawmill has grown significantly and extended its wood processing capacity. Although this has led to an increase in revenue, the previous system for tracking inventory and controlling stock could no longer cope, so the IT team began to look for a new solution which could automate the process.

"Our previous stock-control system was largely based on our staff's memory and their notes on a clipboard," said Søren Krogstrup, acting production manager at Rold Skov Sawmill. "It did not include any capabilities to give us an overview of our stock, locate the stock or actually control stock flow. This could occasionally result in errors in our stock records, which in turn would cause delays in sourcing wood for a client. We needed an automated solution which could record our stocks and give us an overview of what we had so that we could give accurate stock data to customers."

It was also important that the stock control solution was ruggedised and sealed in order to work in the wet, dirty environment of the timberyard. However, the environment itself also presented difficulties - the large open areas with heaps of wet spruce have a high bulk density and a powerful, deadening effect when it comes to radio waves, which is far from an ideal environment for a wireless network.

Consequently, Norris and Zebra had to carry out a comprehensive and bespoke site survey to calculate the optimal arrangement of the access points to ensure complete wireless coverage of the site. Furthermore, the uneven terrain meant that any vehicle-mounted equipment had to be able to withstand jolts and impacts, as well as operate in wet weather and dirty conditions; and survive vast quantities of sawdust.

Solution: Online ERP in all trucks

The Rold Skov sawmill team chose to use bar coding and scanners in conjunction with a wireless network to record details of the timber stock. A bar code label made of plastic is stapled onto the different packs of wood products when they enter the first stages of processing.

All packs are fitted with bar code labels and all trucks are equipped with vehicle-mounted mobile computers and wireless bar code scanners from Zebra. Truck drivers fetch and deliver the large packs of wood from all over the mill's grounds. The wireless network covers all important areas of the sawmill, so information can be instantly routed over the network to the back-end system.

Rold Skov chose to work with Norris Print-Tech to supply the bar codes and handle the implementation, and Zebra to supply the rugged bar code scanners and wireless network.

The Zebra scanners and vehicle-mounted computers are sealed to IP65 level, so they are completely immune to dirt penetrating the interior of the device or water being sprayed onto them. They are attached to the trucks carrying the processed wood so that the packs of wood can be scanned and details logged via a Bluetooth link before being moved from process to process.

At the heart of Rold Skov Sawmill's new stock control solution is Microsoft's Navision XAL ERP system. The ERP system which controls the production and stock management is now accessible to both production staff and truck drivers via the wireless network and data is entered via the vehicle-mounted mobile computers. After scanning a wood pack, the ERP system notifies a driver of where to go, and keeps track of where all products are.

Results: Complete overview and improved effectiveness

As a result of going from a paper-based to an online stock control system, Rold Skov has complete visibility of all stock in real-time. Rather than depending on inventory counts and our truck drivers' knowledge of where things are, the sawmill now benefits from a real-time overview of the stock pile.

SUCCESS STORY
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3

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Norris Print-Tech

Norris Print-Tech is a Danish company that has been working with bar code systems and data capture since 1986. The headquarters in Aalborg and the sales and service department in the Copenhagen metropolitan area deliver solutions and service for bar code printing and data capture – such as label printers; label design software, including connections to administrative systems; labels and ribbons; automatic labeling systems; and peripheral equipment for labeling and data capture. Norris Print-Tech's clients now include many of Denmark's largest corporations. **www.npt.dk**.

FURTHER INFORMATION ABOUT ZEBRA PRODUCTS CAN BE FOUND AT: WWW.ZEBRA.COM

ABOUT ZEBRA

Zebra Technologies Corporation is a global leader respected for innovation and reliability. Zebra offers an extensive range of asset-tracking technologies incorporating mobile computing, data capture, barcode, wireless LAN, RFID, location systems and Zatar™, the cloud-based Internet of Things (IoT) platform. These technologies make businesses as smart and connected as the world we live in. Zebra's tracking and visibility solutions transform the physical to digital, creating the data streams businesses need in order to simplify operations, know more about their business, and empower their mobile workforce.

Zebra's products and solutions are used around the world by industries including healthcare, retail, transportation and logistics, manufacturing and sports—for a variety of applications from improving patient safety; to eliminating checkout lines with mobile devices; to streamlining warehouse operations and adding a new dimension to professional sports and entertainment with real-time information.