

Automatic Data Entry Simplifies Product Tracking System During Wood Production

Moretti Interholz, an Italian wood production manufacturer, uses PowerScan industrial bar code readers to track laminate wood products through the manufacturing processes. This has allowed Moretti to become far more effective while saving a great deal of time during the manufacturing of their wood products.

Moretti Interholz Uses PowerScan™ Industrial Bar Code Readers to Track Laminate Wood Products in Manufacturing Processes

Overview

Moretti Interholz is one of four companies within Moretti S.p.A. Moretti Interholz has produced laminate wood products for over 25 years and among the first in Italy to develop wood products for the construction level. Moretti Interholz serves a wide range of construction projects including cinemas, shopping centers, wineries, schools, sports complexes, hotels and more. It is Moretti Interholz's continuous investment in technology and cooperation with leading experts in the industry that has pushed the boundaries of their high quality wood products.

The Challenge

To comply with the European Standard for marking and tracing products used in construction, Moretti Interholz decided to identify and track its wood products in various stages of production through a new automated system. The company's reputation for automation and optimization was the driving force behind Moretti Interholz's decision to bring more automation its wood production processes.

For their new system, Moretti Interholz needed to ensure traceability of all constituent components, emphasizing the origins and characteristics of the raw materials that make up the finished product. In order to create an efficient automated tracking system, Moretti Interholz determined that they needed to implement an automatic identification system using bar codes to provide traceability for incoming goods, semi-produced and finished goods.

"We advised Moretti Interholz to choose a bar code solution over RFID because the insertion of a tag within a block of wood could influence the mechanical properties of the artifact," said Mario Beltrami, RFID Division Manager at SAIT Srl. "Moreover, the specific needs of Moretti Interholz could be managed through a simple and inexpensive process as the bar code, which resulted in complete customer satisfaction."

The objective of the new system was to minimize the impact of changes to their normal working routines by simplifying processes and to further improve the automation of data entry into the system.

The Solution

Moretti Interholz was looking for a cordless bar code scanning solution to track products requiring maximum mobility for the operator. The solution also needed to be simple and intuitive for any operator to pick up and use. With the assistance of expert SAIT Srl, Moretti Interholz selected Datalogic's PowerScan™ PM8300 industrial cordless reader to meet their needs.

The PowerScan PM8300 reader was the ideal solution for Moretti Interholz's industrial production environment because the scanner maintains high reliability and performance in the most extreme cases. Since the dust level inside the facility is high due to the nature of their wood-based products, the reader's IP65 rating provided excellent resistance.

Furthermore, the noise level of the production machines often drowns out the 'beep' indicating the 'good read' of a bar code. If the operator had to rely on the audio beep, it is very likely that tracking errors would occur. By selecting the PowerScan reader, however, Moretti Interholz can provide their operators with additional verification through Datalogic's 3 Green Lights (3GL™) technology. This allows the operator to receive immediate visual feedback through LED lights on top and near the back of the scanner and also a confirming beam of green light directly on the bar code.

During the production process, Moretti Interholz uses the PowerScan readers to read the bar code label associated with different batches, or declared piles of wooden planks. Once the wood is cut and glued together to become laminate, it is labeled with a bar code containing information regarding the date of manufacture and the materials used for bonding. This unique ID lets the operator know if the product is finished or if it is ready for further production.

This information is useful when the wood is transported as carpentry components for more processing (i.e. cutting, beveling, milling, drilling, retouching and color). At this point, the operator reads the bar code on the wood product with the PowerScan reader and prints the new bar code labels to be applied to various end products.

When the carpentry process is finished and the order can be dispatched, the operator reads the bar codes on all the finished good labels and automatically prints the packing list. This document contains the list of all the products to be shipped and a bar code encoding the same data.

After loading a truck with finished goods, a carrier simply needs to read the bar code present on the packing list to obtain the immediate release of DDT (Documento Di Trasporto, or transportation document).

The Results

“Datalogic’s scanning technology and project development support from SAIT allowed us to develop a tracking system to work effectively and efficiently in our tough production environment. It allowed us to achieve the goal of further automating and securing the functions of logistics and shipping goods,” said Dr. Giacomo Mantelli, former Director of the IT Department of Moretti Group and now Project Manager for this application. “By implementing this new system, the Moretti Group once again demonstrates its ability to offer the best balance between quality production and service.”

Customer

Moretti Interholz

Industry

Manufacturing

Sub-Industry

Construction & Building

Application

Track and Trace

Geography

Italy

Datalogic Product

PowerScan™ PM8300

Datalogic Partners

SAIT Srl