



LIGHTING THE WAY
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Intermec's wireless printers and handheld computers help

Osram Sylvania ship two million lamps per day

By Lois Fenimore

AUTOMOBILE makers are pioneers of lean and agile manufacturing, placing them at the pinnacle of efficient production processes. But just-in-time delivery, a critical aspect of lean and agile, can shut a production line down if parts arrive late, are mislabeled, or the wrong parts are shipped.

Osram Sylvania knows that only too well.

Osram Sylvania can trace its history back almost to the day Edison invented the modern incandescent light bulb in 1879. Today, it's the second largest lighting company in the world, with customers that include major OEM automobile manufacturers and aftermarket suppliers around the world.

A visual nightmare

The company supplies products that can be labeled in any of more than 175 formats, depending on the customer's requirements. Each customer can require its own label format, with data that varies from customer to customer. For example, a customer may require that its shipping label contain a purchase order number, a customer-specific part number, a delivery number, a dock code, a supplier number, all of the above, or even more.

Although the company had been using a semi-automated shipping processes for years, the procedure for verifying label accuracy was still manual. A shipping worker would have to stop what he or she was doing to wait for a dock auditor to visually verify label accuracy prior to transferring a pallet from the dock to a waiting truck. With this inspection process, the company's workers would verify only one label per box, per pallet, per shipment.

The company ships nearly a million lamps per day using more than 3,600 different product codes. With that kind of volume, a manual process just couldn't keep up with demand.

"Even at the best of times, manual/visual inspection is only 80 percent effective," said Phil Shaw, manager of warehouse control systems for Osram Sylvania.

Previously, all the labels for a shipment were printed at one time. This meant that if a customer ordered 10 different

products, the labels for those products were printed at one time and then products were labeled. Because the material handler had different product labels, there was a chance that a box of product could have the wrong label applied.

Once all the labels were applied, the material handler would notify an auditor that the shipment was ready for audit. If the auditors were running behind, the material handler would have to wait before the product could be prepared for shipment. On busy days the wait was sometimes lengthy. Because of time considerations, only one box per part per pallet was checked for labeling accuracy. The auditor would have to refer to the picking document to validate all the necessary criteria for that particular customer's label and requirements.

The visual audits were not 100 percent accurate and certainly could not guarantee that there were no mistakes. Sometimes errors were discovered at the end of the day and a "fire drill" would ensue to correct the problem before the carrier arrived to pick up the delivery.

Shutting down a customer's line

Last year, incorrect labels resulted in a serious shipping error. Two almost-identical products had their labels inadvertently swapped. Although the product shipment went through three visual audits, the problem wasn't caught. The result was incorrect product was shipped to the customer, which shut down their production line.

"This made us look at how we do things through the entire plant," Shaw said. "We knew labeling was critical, but we didn't realize that up to 70 percent of shipping errors were actually labeling errors," as reported by a major OEM customer. "An inaccurate label or mislabel is just as serious as shipping the wrong part."

The company decided to examine its processes to determine how it could validate every single label being printed and verify picking, packing and shipping.

Print on demand anywhere

Osram Sylvania turned to Catalyst International to improve



“Our customers are thrilled. It’s been a real home run for us.”

—Phil Shaw, manager of warehouse control systems, Osram Sylvania.

workers to print labels whenever they’re working, not just where there’s power and a network connection, eliminating the need to run back and forth to a fixed station printer. “We wanted to bring the printer to the product,” said Shaw.

100 percent verification

The Intermec solution allows Osram Sylvania to verify 100 percent of the products it ships, guaranteeing virtually 100 percent labeling accuracy. “We wanted a user-friendly system that would step workers through the process,” Shaw said. “The new computers and printers provide just that.”

Now workers use the 750 to read a delivery number that tells the system exactly what information is required to print correct labels for that particular customer—what customer codes and critical information are required. The system then automatically prints the correct quantity and type of labels for that particular product. In addition, the 750 is used to verify that the label is indeed printed correctly.

“It’s literally ‘fill in the blanks.’ It makes sure you’ve performed all steps in the process,” said Shaw. “If things aren’t done correctly, the system won’t let us continue. It won’t allow you to create paperwork and ship an order without all steps being performed.

“The users like the system too. Initially, they were nervous about using the new technology, but after a two-hour training session, they were up and running. Now, they can’t imagine how they lived without it.

“In a meeting last week, I asked how they’d like to go back [to the previous way of doing things]. They looked at me like I had 20 heads. They absolutely love the new system. It’s state-of-the-art,” Shaw said. “Now, when we ship something, we can guarantee it’s 100 percent error-free. We hope never to measure another error.

“Our customers are thrilled. It’s been a real home run for us.” ■

their business processes and address their wireless strategy.

Revamping the validation process began with hardware; finding a vendor that could provide the devices that would perform the tasks Osram Sylvania required was critical. Any new device had to contain a scanner that would read multiple bar code formats, had to incorporate wireless communications capabilities, and had to comply with the company’s standards for security.

In addition, Osram Sylvania needed to find a way to print labels on demand at the point of application.

The company selected Intermec Model 750 Pocket PC computers along with Intermec EasyCoder® 3400e wireless printers mounted on mobile carts provided by PowerCart.

“The 750 PDA really fit the bill,” Shaw said. “It had all the capabilities: it could scan all bar codes, it’s light and easy to use, plus it has the security we need.”

The 750’s imaging scanner allows it to read both linear and 2D bar codes. In addition, the 750’s 802.11b wireless networking capabilities and embedded security protocols ensure seamless, secure data transmission throughout the facility.

The wireless printer/PowerCart combination allows

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Resources:

Osram Sylvania: www.sylvania.com | Catalyst International: www.catalystinternational.com | PowerCart: www.powercart.com
Intermec 750 mobile computer, EasyCoder 3400e printer: www.intermec.com