

Case study

**Webasto**



**At a glance**

**Industry:** Industrial Goods

**Market:** Automotive

**Application:** Manufacturing Operations

**Product:** Intermec PM4i printer

**Partner:** ToolWorx

## Intermec Printers Help Webasto Roof Systems Eliminate Risks of Human Error and Costly Charges

Webasto Roof Systems is a leading manufacturer of roof and temperature management systems for automobile manufacturers. Its sunroofs are found in millions of cars around the world. In the automotive industry, it is extremely important that parts are labeled correctly prior to reaching a manufacturer's assembly line. For Webasto, if its sunroofs are mislabeled, a black sunroof could end up in a white car. To ensure this does not occur, Webasto labels its sunroofs so that the right sequence of roofs matches an assembly line order. Proper sequencing assures that the right sunroof is installed in the assigned vehicle. The incorrect sequencing of one sunroof can cause assembly lines to shut down for hours at a time, which translates into lost time, money and penalties.

"Proper labeling is a big issue for automotive suppliers," says Mike Thibideau, Chief Information Officer of Webasto. "Misidentified parts get very costly when it forces lines to shut down. It can also prevent suppliers from quoting on new business, so you can understand why it is a high priority for us."

In order to assure the sunroofs are always dispatched in the correct order, Webasto turned to ToolWorx, a systems integrator specializing in automated data collection applications for lot/part traceability and error proofing, and Intermec Technologies. ToolWorx implemented their ToolWorx SmartPack™ system that helped Webasto sequence the sunroofs in the proper order using Intermec's reliable and durable PM4i printers, ruggedized printers that could withstand the rigors of the production line environment.

### **The Problem with "People Proofing"**

Webasto ships hundreds of sunroofs a day in large containers to automobile manufacturers. Prior to implementing the new solution, there were three levels of quality control to assure the right products were being sequenced according to customer requirements. The first inspection occurred at the end of the production line. Using a set of preprinted module and rack labels, an operator manually applied labels to each module and to the completed shipping container. The second inspection occurred after the product left the warehouse. Another

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worker visually examined the sunroofs in the container and verified that they were in the correct rack position according to a sequence print out. The final quality control checkpoint occurred prior to shipment. Before the container was loaded onto the truck, someone else checked the roofs against the ordered sequence.

Even with multiple inspection points to assure the right sunroofs were placed in the right order, errors still occurred.

"It was a manual process that was high cost, high effort and prone to human error," Thibideau said. "We needed a system that reduced the amount of labor and the potential of errors made during the proofing process. In addition, we needed a system that was independent of our existing labeling software and had availability 24/7. We couldn't afford to stop production should our network or ERP system be unavailable."

#### **A New Sequencing Solution Eliminates Risk of Costly Mistakes**

Under the new system from Intermec and ToolWorx, only one auditor is needed for the quality assurance check which takes place at the end of the production line. A number of automated tests are performed on the sunroof to ensure that it meets all quality standards. After successful testing, an approval bar code label is automatically printed and applied to the sunroof. Once a rack is filled, all of the sunroofs are scanned in position order into the Intermec PM4i printer to validate their part number, color, and sequence within the



rack. If the validation is successful for all modules, the rack label is printed allowing the sunroofs to be staged for shipment.

"The Intermec PM4i printer has an integrated processor, complete with operating system and programming language that enables the development of a fully independent solution," said Ray Silvius, business analyst for Webasto. "Because the system is self contained, production is not interrupted if our network or ERP system becomes unavailable. Ultimately, this component, combined with its industrial construction, reputation for durability and previous experience with Intermec is why we chose the PM4i over competing products."

The "smart printing" component is the distinguishing feature of this system, making it different than typical mobile terminal and printer solutions. Designed specifically using Intermec Smart Printers running ToolWorx SmartPack™ software, it is a first for the automotive industry. This feature

minimizes the opportunity for human error, further reducing possible expenses. As the scanner communicates directly to the Smart Printer, there is no server necessary to transmit the information from the handheld to the printer. As a result, labels can be printed under any circumstance. Since the installation of the new system, there have been zero failures. Webasto estimates that it saves up to \$12,000 a month in labor costs and more than \$4,000 a month in expediting charges and other indirect expenses.

"The best part of this particular solution is that the printers do more than just print labels with the lights out," Thibideau added. "This is an error proofing solution that will continue to provide significant ROI. We anticipate saving approximately \$190,000 in the first year alone."

Webasto also likes that the solution isn't specific to a particular product or line. For instance, if the company begins supplying a new automobile manufacturer that needs sequenced production, the ToolWorx/Intermec solution can be easily appropriated to the new line.

"We can use this solution for numerous product lines and with different customers," Thibideau said. "We believe in the long term this application will provide a strategic competitive advantage in addition to making us more efficient. This solution not only helps us reduce risk of errors and save costs, but it will ultimately contribute to improved customer satisfaction."

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