Medtronic

At a glance

Industry: Healthcare

Market: Medical Supplies and Devices

Application: Manufacturing

Product: Intermec PX4i High Performance Printer

Intermec Smart Printing Solution Empowers Medtronic to Change More Lives

The world leader in medical technology and pioneering therapies turns to Dasco and Intermec to transform business processes.

Millions of people worldwide depend on Medtronic solutions to alleviate pain, restore health, and extend lives. Medtronic's robust product portfolio enables the company to change the face of chronic disease.

A vital aspect of Medtronic's mission to help individuals plagued with lingering infirmities is developing efficient, error-proof methods of manufacturing its medical devices. In its implantable pacemaker production facility, Medtronic was faced with the challenge of finding a solution that could quickly and cost-effectively support quality and batch control of assemblies including battery packs, capacitors and power supplies that are built separately and integrated into the final product later. Specifically, Medtronic needed a way to create a serialized label at the point of work in real-time and on-demand that could operate in its clean room environment.

In 1998, while attending a tradeshow looking for solutions to Medtronic's business problem, Technician Roger

Paxton encountered Dasco Label, an organization that had extensive experience helping companies with similar needs. A long-time Intermec reseller partner, since 1954 Dasco has specialized in providing labeling solutions to industry-leading manufacturing and medical companies.

The standard solution to address Medtronic's challenge would have been a data collection system hosted on a centralized PC, with interfaces to scanners, barcode printers, and labeling and manufacturing software. However, with Dasco's familiarity in solving similar challenges they opted for a smarter, more efficient option.

In collaboration with its software developer partner MiSim, Dasco recommended an Intermec Smart Printing bar code labeling solution hosted on Intermec PX4i printers that would generate labels on demand as production line workers assembled the units.

Intermec Smart Printing eliminates the need for a host PC and its associated support costs and complexity by enabling user-defined applications written in the powerful Intermec Fingerprint programming language to run stand-

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alone, directly in the printer. Since Smart Printers interface directly with scanners and other equipment, for Medtronic this meant a simpler solution that was more reliable, easier to maintain in the clean-room environment, and delivered a lower total cost of ownership compared to the "standard" solution.

"Our long history of working with Intermec Smart Printing solutions made our recommendation a clear and easy choice," said Brad Bellows of Dasco Label. "This solution continues to make significant impact, customer after customer."

Within weeks after their initial meeting and deciding on Dasco as the solution provider, the system was deployed and Medtronic was benefiting from the barcode solution.

The Smart Printing solution enabled Medtronic to:
- Reduce risk for errors due to mislabeling since labels are generated at the point of work
- Improve workflow and save time by eliminating unnecessary trips to generate print commands and pick up labels
- Reduce continued IT spending since no additional PC maintenance and support resources are needed.

"Dasco provided top-shelf resources and support," said Paxton. "If they didn't have the resources to address a problem or question they'd get the resources to get the job done in a timely and effective manner. I've never run into a situation that they couldn't overcome. The right tool and the right people made my job easier, we have a great working relationship, and the Intermec equipment is rock solid."

Since becoming more operationally efficient, production line workers simply ask the printer to generate the amount of barcode labels that correspond to the actual amount of units being developed. This is in comparison to the previous manual process which was time-consuming and at times inaccurate.

In addition to the efficiency and cost savings benefits, the Smart Printing solution easily adapts to new business processes without the need to upgrade printer hardware, making it a solution for tomorrow as well as today. In 2006, this was the case when the emergence of 2D (two-dimensional) barcodes led Medtronic to upgrade its solution to benefit from the small size and increased data capacity of 2D symbology. The 2D barcodes met Medtronic's need to print data-intensive barcodes that were small enough to fit on the minute pacemaker components, and could withstand durability tests such as being swabbed with alcohol.

"We print hundreds of thousands of labels a year, Intermec Smart Printing has been superb and dependable for over 10 years," said Paxton. "The solution has been extremely easy to manage, providing hands off, maintenance-free printing. I would highly recommend this solution to any business considering deploying a barcode labeling system."

Since implementing the solution in the division that makes pacemakers, other Medtronic divisions have deployed the system utilizing the best practices garnered at this location.

"Dasco, MiSim, and Intermec have significantly streamlined our businesses processes ensuring we can continue to accomplish our mission. This solution not only saved us money, but it is allowing more pacemakers to be produced and more lives to be saved," concluded Paxton.

In a continuing effort to improve our products, Intermec Technologies Corporation reserves the right to change specifications and features without prior notice.

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