Vision Engraving & Routing Systems

The largest manufacturer of engraving and CNC routing machines goes paperless with RFgen Mobile Foundations for SAP Business One.

At a glance...

Industry
Industrial Machine Manufacturing

Application
Custom Production Order Management

Environment
SAP Business One 9.1

Vision Engraving & Routing Systems is the largest engraving machine manufacturer in North America. For more than 30 years, the company has produced rugged, reliable, low-maintenance engraving and CNC routing machines. Every machine is manufactured in the USA and delivered with superior customer service.

The Challenge

Vision Engraving & Routing Systems was using a heavily paper-based production order process. With up to 250 machines being built at any time, keeping up with the paperwork presented challenges for the production team. Workers spent too much time walking paperwork around the facility and waiting for paperwork to be manually entered into SAP Business One so they could move on to the next step in production. It could take hours to process paperwork into the ERP, leading to confusion about current inventory levels. Vision Engraving & Routing Systems executive, Joe Ivanenok, wanted to eliminate paper from the production process to improve efficiency and accuracy, as well as reduce costs.

"Production Orders are created in SAP Business One from the bill of materials contained in the software. We print the electronic Production Order in SAP Business One for the assembly team to use in building the machines. The only time the information on the production order was correct was at the moment it was printed, but most of the time, it would sit there for days before someone picked it up," recalled Ivanenok.

He continued, "There was too much manual handwriting and walking paperwork to someone who processed it back into SAP Business One. If we had 10 people on the floor working on 10 production orders each day, we had to process 100 production orders and that's time consuming."

The Solution

To address these challenges, Ivanenok decided to implement barcode scanning and automate the production paperwork so it could be completed from tablets on the production floor. RFgen Mobile Foundations for SAP Business One enables businesses to implement wireless barcode scanning to support warehouse operations and order processing. RFgen automates data collection and its integration is certified by SAP for SAP Business One version 9.1 and SAP HANA. RFgen deploys rapidly, leaves no footprint on the SAP Business One server and requires virtually no overhead to manage.

Ivanenok chose RFgen because it runs on its own server, yet updates SAP Business One automatically. "We have had nightmares with companies that make add-ons for SAP Business One. So it was great that RFgen is not an add-on, nor does it run in SAP Business One. It is separate software that automatically updates SAP Business One. It happens immediately and we don't have to be involved in it."

Deployed on tablets with wireless barcode scanners, RFgen has automated every aspect of production order processing at Vision Engraving & Routing Systems. "We used to shuffle reams of paperwork. Now everyone at their production station has a Dell® tablet with a detachable keyboard. The tablets only run RFgen and are on a wireless network. Workers are immediately connected to the RFgen server and our production process is now automated online in real-time."

RFgen

The Result

RFgen is already delivering a significant return on investment. RFgen has enabled the company to:

- Eliminate 181 hours annually of walking paperwork around the warehouse.

- Implement barcode scanners and tablets throughout the production process.

- Achieve a paperless production process, saving tens of thousands of dollars and nearly 60,000 sheets of paper each year.

- Reduce order processing time by 684 hours per year.

- Save over $22,500 per year, achieving a full return on investment in less than one year.

Paperless Workflow Created Immediate ROI

Ivanenok's goal was to have the RFgen software pay for itself within one year of deployment. "We were looking for a one year ROI, but I think we will definitely exceed that in the first year, based on the amount of time RFgen has saved everyone."

Armed with their RFgen-enabled tablets, production workers no longer need to walk paperwork around the building. That eliminated 181 hours annually of walking paperwork around the warehouse. RFgen has automated production order processing, saving another 684 hours per year. In total, Ivanenok calculated time savings worth $15,586 each year. The company has also completely eliminated paper from the production process—an additional savings of $6,957 in printing costs and nearly 60,000 sheets of paper saved.

Better Visibility into Inventory

Before RFgen, production workers had no visibility into real-time inventory levels because a paper production order might have been printed out days or even a week earlier. In the time that ensued between printing and pulling parts, inventory levels would change. With RFgen, workers now pull up production orders on their tablets and can see instantly if current inventory levels are sufficient to complete the production order.

"Now, if a line item on a production order has less inventory on hand than what's needed to complete the production order, the inventory item is highlighted in red. It's better to figure out inventory problems before starting," said Ivanenok. "It can take 30 minutes after the fact, but only five minutes if we identify it early."

Rapid Deployment

To kick off the project, the team at RFgen worked with Ivanenok to capture requirements during a Business Analysis Workshop (BAW). RFgen was deployed about six weeks after Vision Engraving & Routing Systems signed off on the BAW. The project was completed two weeks ahead of schedule and on budget. "The software works exactly as we hoped it would work," Ivanenok said. "RFgen was incredibly easy to work with. They are very attentive. They listen and they do really good work. There is absolutely nothing that I can say negative about them. They were fantastic through this whole process."

Ready for Future Growth

Ivanenok is already thinking of additional processes to automate in the future and said his first call will be to RFgen. Because RFgen integrates with both SAP Business One version 9.1 and SAP HANA, Ivanenok has the flexibility to pursue whichever technology makes the most sense. He said, "I am pretty certain SAP HANA will be the only database SAP supports at some point in the future. When that happens, it will be easier for me knowing RFgen already supports SAP HANA."

With RFgen in place, Vision Engraving & Routing Systems could increase production without having to add as much staff, putting the company in an enviable position for growth. "RFgen will make it a whole lot easier for us to scale up for future growth. If we had doubled in size without RFgen, we would have needed to add two people just to process paperwork all day long. Now, with RFgen, no one processes paperwork. There is no 'scale'. You just hand the production team another tablet."