



Overview

Industry: Medical Wire

Customer Profile:

Fort Wayne Metals researches and develops fine-grade medical wire.

Business Situation:

The bar code system for tracking shop-floor transactions was expensive, slow, and difficult to use. Time-outs frequently caused employees to lose their work. Changes to the old system required many weeks of lead time and were therefore costly.

Solution:

Aptera used a Web-based ASP.NET application enabled with AJAX to manage all aspects of the bar code system. A user-friendly interface and advanced functionality were implemented to improve tracking throughout the production process.

Benefits:

- All materials are now traceable through every phase of the refining process.
- The new interface made the system user-friendly for employees.
- Extensive logic and validation reduced or eliminated many of the errors that occurred in the old system.
- Transactions that took several minutes are now completed in a matter of seconds.
- A temporary disable function allows the ERP system to go offline without disrupting shop-floor activity.

Improved Bar Code System Improves Wire Manufacturer's Shop-Floor Transactions And Material Traceability

“The new system works great. Every aspect of it is better than the old system, and it is working better than we could have hoped for.”

— Jeremy Rohrs, ERP Project Manager, Fort Wayne Metals

Fort Wayne Metals is an industry leader in the research and development of fine-grade medical wire made of stainless steel, titanium and titanium alloy, specialty alloys, and precious metals such as silver and platinum. Fort Wayne Metals' main headquarters and facilities reside in Fort Wayne, Indiana, but production, warehouse, and sales facilities also exist in Ireland to serve the European market.

The Situation

Fort Wayne Metals was using a software system to create and manage bar code labels for tracking its inventory. This system was essential because it tracked material through various production processes.

Although the system worked, it was expensive, slow, and difficult to use. Employees were spending more than the necessary amount of time performing shop floor transactions. The system would often time out while employees were waiting for transactions to complete, causing them to lose the all the time they had already spent and forcing them to restart the process.

During this time, Fort Wayne Metals was also working to implement its ERP inventory system. The association between the problematic bar code system and the ERP system caused users to form negative attitudes towards the ERP.

When evaluating the cost of licensing the old system for use in two additional facilities, Fort Wayne Metals realized that it might be cheaper to re-write the software than acquire the additional licenses. Changes to the old system required many weeks of lead time and changes were typically complex and therefore costly.



Transactions that took several minutes are now completed in a matter of seconds.

The Solution

Aptera developers worked with Fort Wayne Metals to create a high-performance, AJAX-enabled ASP.NET Web-based application to manage all aspects of its bar code labels. This new system provides users with a smooth interface and the necessary functionality to perform shop-floor transactions all across the production process, from receiving raw materials to producing finished goods for final inspection.

It also makes materials traceable as they move through the process, an important requirement in the medical wire industry.

The new bar code system streamlines and tightens the manufacturing process, alleviating the performance headaches employees faced under the old system. The new system includes extensive logic and validation, reducing or eliminating many of the errors that occurred in the old system. Shop-floor transactions that took several minutes to perform in the old bar code system are now completed within a matter of seconds.

As the new bar code system performs shop-floor transactions, corresponding transactions are automatically submitted to Fort Wayne Metals' ERP system via Web service calls. With the old system, users could not perform shop-floor transactions during month end processing, which could last as long as several hours.

The new bar code system allows Fort Wayne Metals to temporarily disable processing service calls; this function places the calls in a queue until the process is re-enabled and they can be submitted. The temporary disable mechanism allows Fort Wayne Metals to take down the ERP system (for month-end processing, for example) without disrupting shop-floor activity.

Benefit: Reliability

Fort Wayne Metals now has a completely customized bar code management system that provides the shop-floor transactions and material traceability that Fort Wayne Metals needs to ensure a quality product.