Case Study – Printed Circuit Board Manufacturer

This manufacturer of printed circuit boards makes single layer and multi–layer printed circuit boards. They start by cutting and copper–coating the multiple layers that go into a circuit board. They then photo–etch the copper and laminate the layers into boards. Then they drill the holes into the boards and through–solder the holes. Finally they inspect the boards and ship these to their clients.

At any one time, this client has many jobs in progress and each job has a number of subcomponents that are going through multiple operations throughout the manufacturing plant. This makes it very hard to keep track of the jobs without a computer–based tracking system.

This client had been using a "green–screen" terminal–based system that had become obsolete and needed to replace this with more modern technology. They needed a system which they could customize and modify to accommodate changes in customer requirements. They also needed a system that would handle complex customer order entry tasks and that would integrate with their accounting system.

This client selected BellHawk Systems to provide a PC based tracking solution, using barcode scanners attached to the PCs. In some cases, the PCs had to be mounted in special enclosures because of the toxic chemicals involved.

The major factors in the selection of BellHawk was the availability of Access source code and the fact that BellHawk Systems was able to deliver a complete system at a significantly lower cost than its competitors.

Today, this client uses their BellHawk system to enter all the details of each order and then to use this information to automatically launch a set of jobs to produce all the sub–components and also a job to assemble and finish multiple batches of the required boards. Supervisors and managers are now able to track the progress of all their jobs in real–time and take appropriate corrective action when needed to ensure that customer orders get out on time.

A major benefit of this system is a significant reduction in the amount of time spent finding and expediting orders. Also customer service people are able to be much more responsive to customer inquiries as they are able to look–up the status of their orders immediately without having to request that someone in production go–look for the various components in the factory. The savings in expediting and customer service labor enabled this company to pay for its investment in this system in less than 6 months.

Subsequently, this client used the tracking system as a way of disseminating production information to the operators in the various work cells. Engineering now enters instructions to be added to the barcoded job travelers as well as electronic references to files containing documents, drawings and numerical control machine files before the jobs were released to production. This information is then presented automatically to the operator at the appropriate job step, thereby avoiding mistakes and the cost of preparing and tracking an extensive set of documents for release to production.

For more information about BellHawk, please see our website at www.BellHawk.com. For a free consultation on how to solve your barcode tracking problems, please call 508–865–8070 x302.