



Case Study – Maintenance Department in Clothing Manufacturer

This client is a major provider of work clothes. Their specialty is providing work–clothes embroidered with their customers’ logos. They operate a large number of multi–spindle automated sewing machines which are prone to break–down due to jams, needle breakages, broken belts and the like. These machines are running 24x7 and productivity depends on returning these machines to operating condition as soon as possible. This client moves its products on a large number of automated conveyers that also break–down from time to time.



This client has a team of maintenance technicians that repair the machines when they break. Prior to implementing a barcode tracking system, repair orders were written on white boards in each department by machine operators. As sewing operations take place in several buildings and many departments, technicians wasted a lot of time checking to see whether a department had a repair problem.

Each group of sewing machines already had a PC equipped with a barcode scanner that was used by its operator to select the numerical control program to run the sewing machines. We added a BellHawk program whereby they could scan the machine and the spindles that were down as well as the reason that they went down.

Now, when a technician is finished one repair job, they can use a PC to see a list of the repair jobs that need doing and sign up for nearest or most important one. When the repair job is completed, they immediately use the PC by that machine to indicate that the machine is now operational. They also use the PCs to record what parts were used and to indicate parts that need to be ordered to get the machines running again.

In addition, the maintenance supervisor and operational department managers are able to see the repair status of each machine in each department in the form of a display with each machine represented by a color icon. Here green is used to indicate a machine that is running, red is used to indicate a machine that is down waiting repair, orange is used for a machine being repaired, light blue indicates waiting for parts, and so forth. By clicking on a machine icon, a manager or supervisor can get all the details of what is broken and the status of the repair.

This client also uses BellHawk to track their spare parts inventory. This avoids having machines off–line waiting for parts that used to be replenished once a week with the old manual system. Now, spare part level are monitored several times a day and replenishment parts are ordered to maintain stock levels and to make sure non–stock specialty parts are ordered as soon as they are needed. This has substantially reduced machine down–time due to stock–outs and has also substantially reduced the time wasted expediting the order of special parts.

A major benefit of the system has been to allow the maintenance department to produce reports that show how many hours a day its technicians spend repairing machines. It also has enabled the maintenance department to produce charts that show how quickly it is able to respond to machines that are down and how efficiently it is able to fix the machines. Most importantly, it allowed the maintenance department to be able to show that most of the machine down time was not due to

repair time but due to the delay in assigning operators to start using the machines again, after they were repaired.

This client has now built upon the success of the machine repair part of their system to add the capability for managers and supervisors of other department to electronically issue work orders for non-repair maintenance orders such as moving offices, setting up conference rooms, and facility repair. This client now uses barcoded work orders for all these activities. Employees scan these work orders using barcode scanners attached to PCs when they start and end work on these work orders. They can also enter comments or other pertinent information. The system then electronically notifies the requesting managers by Email when the work is complete.

The maintenance department also uses its BellHawk system to send Emails to requests that users of its services evaluate how well each work order was completed. Managers and supervisors can then pull up a screen and make any comments and also evaluate the maintenance department's performance on a one to five scale. This enables the maintenance department to monitor the performance of its people and to communicate with department managers using its services.

The ability to request work to be done and to monitor its progress electronically is especially important as the maintenance department has a significant number of its employees who work on the second and third shift and on holidays and weekends to server the 24x7 needs of several plants which are located a number of miles apart.

An important aspect of this client's maintenance and repair tracking system is that it tracks the time each technician or other maintenance person spends on each maintenance task. This not only allows for monitoring the efficiency of technicians but also allows for accurate charge-backs to other departments requesting services from the maintenance department.

There used to be a belief amongst the managers of the other operational departments that used its services that the maintenance department personnel were like the repair men in the Maytag repair commercials and sat around all day doing nothing. Even worse these other managers believed that maintenance personnel were padding their time cards and over-charging departments for maintenance work and services performed. With the new labor tracking system, having maintenance personnel log-in and log out to each job, the maintenance department was able to prove the charge backs by having accurate records that were available to the other managers.

The latest addition to this client's system is the ability to use mobile computers to record repair operations taking place outside the building. This includes recording repairs and repair parts used for repairing roof air conditioners. An important extension that was made to their BellHawk system at the same time was the ability to incorporate sub-contractors into the system. When subcontractors arrive to repair an air conditioner, for example, they are handed a mobile computer and instructed in how to use this to record their labor time and the parts consumed in the repair, clearly identifying those withdrawn from the client's repair inventory.

This system has now become a critical and important component of enabling this maintenance department to operate much more efficiently and with less overhead. Most importantly, it enables the maintenance department to prove its worth by having very complete and accurate records. This enables the maintenance department to resist the ever present temptation by senior management to reduce the head-count in the maintenance department as un-necessary overhead.

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.