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Good Reasons

Why Manufacturers, Distributors, Food Processors, Defense Contractors, Mineral Extractors, Biotechnology, Pharmaceutical and other Industrial Organizations chose to implement BellHawk real-time material tracking and production control systems.

BellHawk can detect operational problems in real-time and prevent employee mistakes. It can also prevent recalls and lawsuits that result from these mistakes.

BellHawk can eliminate:

1

Late deliveries to customers: By knowing the status of their jobs at all times, managers and supervisors can spot problems and take corrective action before and not after the customer calls to complain. Late deliveries are one of the leading causes of lost repeat business. It typically costs 5 times as much to sell a new customer as a repeat customer. Late deliveries result in lost sales and excessive sales costs, both of which have a major negative impact on the profitability of manufacturing plants.

2

Excessive overtime and expediting: When managers do not know that jobs are late until customers call looking for their orders, then the managers spend a lot of time expediting orders. Often they have to have to resort to expensive overtime to get the orders out.

With a BellHawk system, managers can easily see when jobs or orders are running late and take corrective action before, and not after, it is too late.

3

Excessive Customer Service Costs: If customer service does not have real-time access to the status of jobs or orders then they are unable to immediately answer customer inquiries. Instead, they have to call down to the factory floor and have someone in production control walk around the factory floor to find the customer's order. Then production control calls back customer service, who calls the customer. All this wastes an enormous amount of expensive labor. Even worse, the reason the customer usually called in the first place is that they did not get their order when they expected it. This is a great way to lose a customer, not only is their order late but you don't even know where it is when the customer calls.

4

Material Stock Outs: These are a leading cause of late jobs and of time wasted by disrupted production. BellHawk assists managers to avoid these problems by accurately tracking materials and their allocation to jobs and orders. Shortages are spotted as soon as jobs and orders are entered into BellHawk, not when factory floor

operators go looking for the materials to do the job or to ship to the customer.

5 **Excess Inventory:** A frequent response to stock-outs caused by poor material control is to carry excessive material. This is very expensive in terms of financial carrying costs and taxes. With BellHawk, raw materials can be ordered in controlled economic quantities and WIP material only produced in response to job demand.

6 **Running Jobs at a Loss:** A major problem in many manufacturing plants is that they don't know what a job costs as they are producing it or as it goes out the door. As a result, they don't know what the job costs or whether they made or lost money on the job. Studies have shown that companies make 80% of their profits on 20% of their orders (and then throw most of it away on the other 80% of orders). Even worse manufacturers will accept a repeat order (often at less money) on orders on which they previously lost money. BellHawk provides real-time job costing so that managers can see whether they are making or losing money on each job as it progresses through the manufacturing plant and, at the very least, not accept a repeat order at a loss.



7 **Excessive Labor on Jobs:** A major cause of excess job costs is that far more labor was expended on the job than was expected. By tracking labor expended on each job step and

comparing this with labor standards, BellHawk can make managers and supervisors aware of a variance as soon as a job step is completed. Discrepancies can be investigated while a job step is fresh in everyone's memory. Then problems can be prevented from recurring or the labor standards for the job step adjusted to avoid under-bidding the next job.

8 **Excessive Wastage and Rework:** A frequent cause of excessive job cost is material wastage. This can be due to wastage of raw materials or defective products that are scrapped. A closely related cost is the labor involved reworking defective parts. By tracking scrap and rework, and their causes, BellHawk provides managers with the information they need to rapidly investigate and correct these costly problems.

9 **Excessive Machine Down-Time:** In many industrial operations, the plant is making money when the machines are running and losing money when they are not. BellHawk tracks setup, run, and tear down times, as well as down-time to fix, adjust, and maintain the machines. It also tracks the cost of operating the machines and allocates the cost to each job. BellHawk provides the real-time information that managers need to spot and quickly correct problems. It also quickly points up discrepancies between expected and actual performance.

10

Recall and Litigation Costs due to Lack of Traceability:

Many plants cannot trace products shipped to customers back to specific vendor supplied materials and the processes, machines, people, and testing used to convert those materials into the finished products. As a result, when something goes wrong with a product, companies are not able to respond quickly and effectively to the customer's problems. These situations can rapidly escalate into expensive litigation. They can also result in overly broad recalls in response to safety or performance concerns. BellHawk can provide complete traceability from raw materials through shipped products, including the capture of test data. This enables problems to be rapidly traced back to problems with people, machines, processes, or specific vendor material lots. It also enables recalls of products to be limited to those affected by the specific problem or vendor material lot thus saving considerable money that an overly-broad recall would cost.

11

Waste of Managers' and Supervisors' Time:

Managers and supervisors waste a lot of time just trying to find-out what is going-on in their production operations. With customers demanding smaller batches of increasingly customized products delivered within ever decreasing turnaround times, it is becoming increasingly difficult for managers to keep track of what is going on. As a result, they are spending an ever-increasing amount of time processing paperwork when they should be spending their time on solving problems and improving production. With BellHawk, managers and supervisors have a real-time view of what is going on from any computer screen.



All the data is digested into easy-to-use screens and reports from which production problems can be rapidly and easily spotted.

12

Losing Track of Received Inventory:

The receiving dock is a major source of inventory errors. By not accurately counting, labeling and processing received inventory and entering the data in a computer system, employees can cause unintended stock outs or the unnecessary ordering of more inventory. Delays in entering inventory data can cause delays in production jobs or customer orders waiting for these materials. With BellHawk materials can be identified and related to vendor purchase orders using a simple barcode scanning process that eliminates many potential sources of error. When designated storage bins are used for materials, materials are placed in overflow locations when the designated bins are full. BellHawk tracks these materials in overflow storage so that they can be quickly and easily retrieved.

13

Failing to Track the Quality Control Status of Materials:

Major problems arise when employees use materials that have not passed appropriate quality control inspections on jobs or ship such materials to customers. This can result in wasted materials and serious customer recalls. BellHawk prevents these problems by tracking the quality control status of materials from the time they are received or made until they are used or shipped. This includes tracking materials waiting for inspection, tracking whether they have passed or failed, and limiting the movement of non-qualified materials to

quarantine areas. BellHawk also tracks the lot numbers of all materials so that statistical quality control processes can be used and whole batches marked as failed if enough failures occur in test samples. BellHawk also has the capability to capture and evaluate test and process data as part of the quality control process and to produce Certificates of Compliance and Analysis.

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Picking, Packing and Shipping the Wrong Materials to Customers: This can lead to a number of unhappy consequences. At the very least it will result in an unhappy customer. It may result in having to ship replacement parts to a customer, often with expensive expedited shipping charges. It may also result in very expensive late delivery penalties or even in order rejection or contract cancellation. BellHawk tracks the material being picked and packed for orders and makes sure that the materials are correct for the order. BellHawk monitors the materials as they are being loaded onto trucks and compares the materials loaded versus the materials ordered. It warns employees if they are trying to load the wrong material onto a truck. It also enables the shipping supervisor to make sure that all the required materials have been loaded. BellHawk produces the Bill of Lading for what was actually loaded on the truck and can also produce an accurate electronic manifest and Advanced Shipment Notice.

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Costly Paperwork and Data Collection Errors: To try to efficiently run their operations, many managers have their production people fill-out a variety of reports using pencil and paper. These reports then pile-up on the manager's desk, are filed, or are keyboarded into a computer to produce reports. The handwritten data is typically keyboarded into a computer program such as a spreadsheet or an ERP system. Usually this is done the next

day, so that the data is not available to managers until it is way too late to take effective corrective action. With BellHawk, employees use barcode scanners to collect the data. This eliminates the time to write down the data. It eliminates the considerable labor time to enter the data into a computer. It also makes sure that the information is available to managers as soon as problems occur.



A BellHawk system will typically pay for itself in six months or less in cost savings. More importantly it can prevent expensive recalls, lawsuits and the loss of sales due to employees making mistakes and problems not being detected in time.

BellHawk runs on standard Microsoft Windows based PCs, servers and mobile computers. It is compatible with most Motorola Symbol barcode scanners and mobile computers.

BellHawk is available as standard packages for applications such as production, the warehouse or materials tracking and traceability. It is also available as a customized solution, integrated from a wide range of available modules. These modules can then be further customized to meet the specific needs of individual organizations.

All BellHawk solutions come with the ability for organizations to customize their own reports as well as to integrate BellHawk with a wide variety of ERP, accounting and financial systems.

BellHawk is available through a nationwide network of BellHawk solution partners who can provide turnkey solutions, including software, equipment and professional services.