

Data Sheet for WIPS Barcode Work-in-Progress & Labor Tracking and Real-Time Production Scheduling System

Overview

BellHawk Systems' Work-in-Progress Tracking System (WIPS) is a low-cost and simple-to-use system that uses barcode scanning to track the work-in-progress status of batches of parts or individual parts through a sequence of operations.

WIPS captures the labor expended by individual people or teams on each operation. It also performs real-time production scheduling based on the data captured.

WIPS is designed for use in manufacturing, fabrication, engineering, construction, assembly, repair and other industrial organizations.

WIPS gives a real-time view of the status of work-in-progress and captures the labor expended for subsequent analysis. Management users can print out reports or download Excel exports giving the status of work-in-progress and showing how long work orders are held up between operations.



How WIPS Works

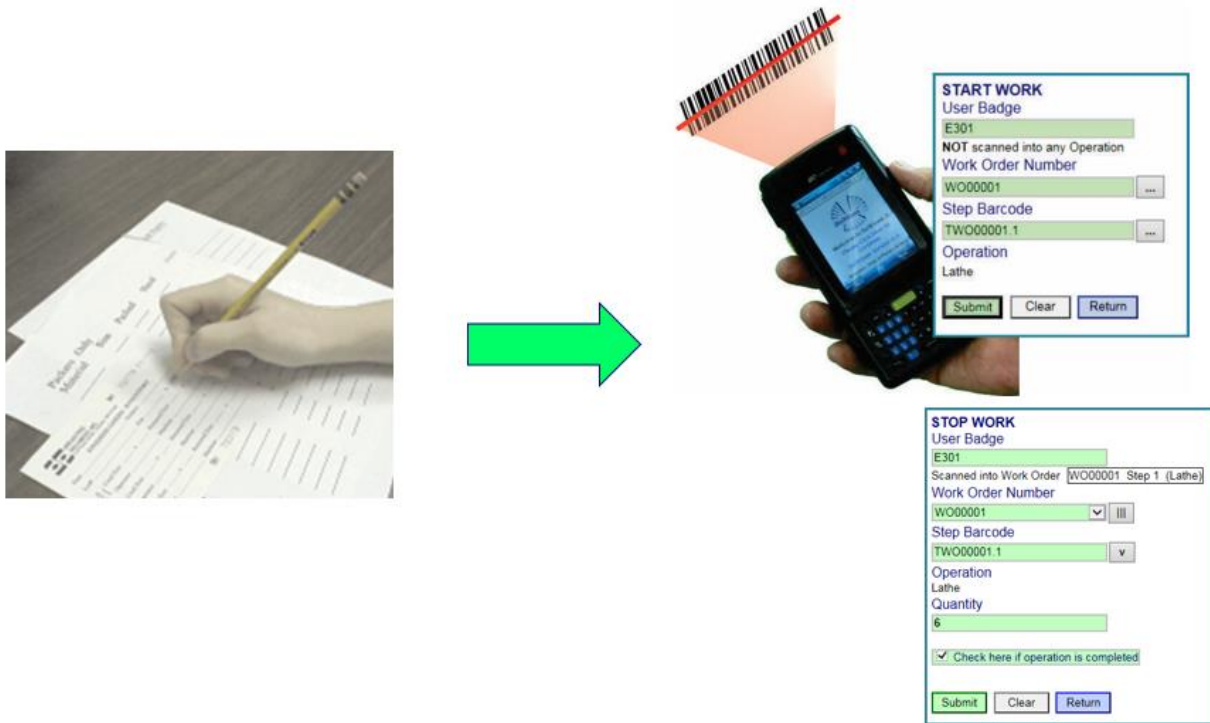
With WIPS, users can set up production routes, and then use these to produce barcoded travelers, as shown here. These travelers can be scanned to track batches of material or individual items.

Alternately these work orders can be imported from another system using one of the available interfaces for BellHawk.

Operators can then record the start and end of each operation by scanning the barcodes on these travelers. This includes recording their labor start and end times by scanning a barcode attached to their badge. They can also record the quantity produced or processed during this time.

<i>Work Order</i>		
<i>Importance:</i>	Standard	<i>WO00000101</i>
<i>Date Wanted:</i>	12/22/2015	
<i>Sales Order #:</i>		
<i>Customer:</i>	CDE Furniture Manufacturers	
<i>Instructions:</i>	Make Stainless Steel Knobs	
	<i>Step #:</i> 1 <i>Operation:</i> Production: Lathe	
<i>Step Instructions:</i>	Lathe	
	<i>Step #:</i> 2 <i>Operation:</i> Production: Drill and Tap	
<i>Step Instructions:</i>	Drill and Tap	
	<i>Step #:</i> 3 <i>Operation:</i> Production: Polish and Inspect	
<i>Step Instructions:</i>	Polish and Inspect	

WIPS enables organizations to easily transition from using paper forms and manual keyword data entry to having their employees directly capture work order tracking data on the shop floor. The biggest advantage of this transition is to enable managers to see the status of all their jobs in real-time so they can easily spot jobs that are in trouble or need extra attention. It also enables subsequent analysis of the labor performance of different workers.



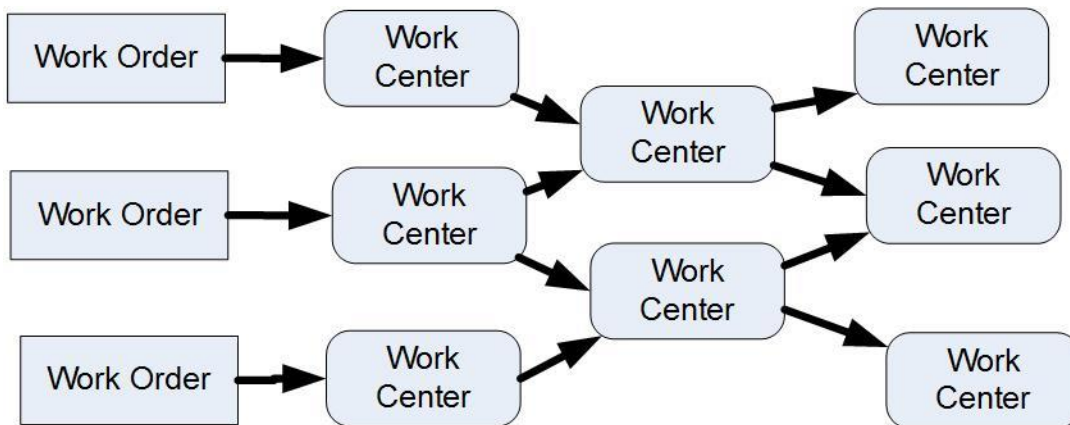
WIPS is designed for use by shop-floor workers who have limited computer literacy. By using barcode scanning manual data entry is minimized. Also WIPS warns users if they make a data collection mistake and allows immediate data correction. WIPS only captures the minimum data needed for each tracking situation. This minimizes training time and eases the introduction of data collection technology to the shop floor.

WIPS enables the recording of time actually worked, as separate from the elapsed time to complete each operation, by enabling users to scan-out when they go on break or their shift ends. WIPS can also allocate labor time when someone is working on multiple work orders at the same time.

Managers, supervisors and customer support people, can then see the status of all the work orders in real-time, including how long each work order has taken or has been held-up, since completion of the last operation, waiting for the next operation to begin.

Managers are able to download Excel exports showing the progress of work orders, the elapsed time for each operation and how much labor was required. They are also able to get a labor report by work order or employee showing the amount of labor time, elapsed time, and quantity produced for each operation on the job.

Real-Time Production Scheduling



The Work Center Scheduling capabilities of WIPS helps manufacturing and other industrial organizations ensure that customer orders get shipped on time by dynamically prioritizing work-orders through multiple work-centers. In performing this real-time scheduling, the BellHawk software takes into account the real-time status of each job, when each operation is supposed to be completed, when the order is planned to be delivered, and the importance of the customer order.

This rules-based scheduling takes place dynamically, in real-time, advising employees in each work center as to the highest priority task for them to work on, without needing intervention from managers or supervisors. It automatically allocates more resources to jobs that are likely to be delivered late or are more important to the organization.

This form of scheduling dynamically allows for new orders to enter the system, machines that break down, people that get sick, and materials that are late arriving. It is ideal for short-run, quick-turn make-to-order manufacturers who do not have the benefit of long run planning or scheduling visibility.

After selecting which work center they are working in, operators are presented with a list of work orders in priority order, based on wanted date and job importance. After selecting a work order the user is immediately taken to start work screen with the work order and operation filled out.

The work center scheduling screen can also be used to add multiple people to existing work order operations and to select work orders for recording the completion of operations.

Configuring WIPS

WIPS comes with the ability for clients to add custom data collection fields to the Stop Work transaction. Clients can also specify additional custom data fields to appear on the header of the barcoded traveler and also for each operation.

BellHawk WIPS Technology



The BellHawk WIPS software consists of a specialized website plus a SQL Server database that run on a Windows Server Computer.

WIPS can be used on a subscription basis in the Cloud over the Internet at a secure data center in the USA. It can also be purchased outright or used on a subscription basis on a client's own Windows Server.

Work order data can be captured using with low-cost barcode scanners plugged into PCs, Android tablets with wearable, hands free, or cordless Bluetooth barcode scanners, or using wireless mobile computers with integral barcode scanners. Work order status data can be viewed in real-time using any web-browser equipped device including most Windows, Android, IOS and Linux based PCs, PDA, tablets, and smart phones.

For those situations where more complex material-flow and materials-transformation tracking may be required in future, clients can start with WIPS and can easily upgrade to the use of the BellHawk JMTS Job and Materials tracking software. JMTS adds more sophisticated work-in-process tracking capabilities such as tracking work-in-process inventory, handling split and merged batches, tracking machine times, as well as capturing materials traceability and activity-based-costing data.

The barcoded travelers can be printed out on standard office printers. As a result the expense of purchasing barcode label printers is avoided.

For More Details

Please see www.BellHawk.com.