WIP SOLUTIONS – WHAT IT IS AND HOW IT WORKS

Work in Process, or Work in Progress, (WIP) is a systematic approach to tracking various functions, inventories and flow during each stage of production. This tool helps businesses achieve high levels of efficiency and accountability by delivering real time tracking information. WIP is commonly used in manufacturing facilities, factory floors and repair centers.

Typically, there are multiple steps or stages a single item must go through as it moves throughout one of these facilities. Each part of a whole may be fabricated at a separate work station by a different handler (person). This means there are multiple opportunities for errors such as missed data input, non-compliance, inventory loss, lost or incorrect orders or labor inefficiencies.

Having tighter control over production processes with a WIP system not only mitigates potential issues and saves unnecessary expenses, it positions businesses for better customer service and revenue growth.

How It Works

In a WIP system, each step of a process for each individual item has a unique set of data that is collected, typically with the use of barcode or RFID scanning technology. The data set may include information such as:

- What the item is and what the end result should be
- The current stage of the item
- What actions are being done
- Who (employee ID) has worked on the item at each stage
- The time it took to complete each action
- The amount of resources and raw materials used for each action
- Quality control history
- Defects
- Compliance regulations

As the item enters and exits a specific stage, it is scanned and the actions performed are recorded. This creates a trail from start to finish. There are many cost-saving benefits that come from having this kind of data trail, such as increased efficiency and productivity, reduced errors and a direct path of accountability.

The Components

A Work-in-Process system is driven by tracking software. WIP software is not a one-size-fits-all product, and can be custom built to suit a business' application needs. The software typically runs on a mobile computer connected to a wireless network (to support real-time updates and data transmittal). Barcode scanners and label printers work with the system to as a means of unique identification and tracking.

WIP in Action (Success Stories)

thinENGINE Customer Success Story #1: A major veneer manufacturer needed a way to grade their wood logs and track the process of slicing them and turning the thin pieces of wood into finished veneer. They also needed a scale interface and way to record time and attendance at each work station. As is the case with most of thinENGINE's customers, the environment was a challenge. Dust, water and heat were issues hindering their previous system's performance.

thinENGINE's Hurricane, an all-in-one industrial pc, provided them with a Windows-based system that would hold up to the environment and solve their application (WIP tracking, log grading, time and attendance and scale interface) needs.

thinENGINE Customer Success Story #2: A major textile manufacturer specializing in cotton needed to track WIP at the loom weavers and dye areas. Employees were required to track job number, material type, processes and any down time that would affect the production time allocated for the job. The labor for any operation, clean up, repair, etc. was applied to the specific job simply by scanning a barcode. In addition to WIP, they also needed a way to track time and attendance in each of the areas. Unfortunately, the dampness and humidity coupled with extreme amount of cotton lint in the factory created a death trap for electronics.

thinENGINE provided a sealed, industrial computer with a barcode badge reader, Motorola laser gun and elastomeric sealed keyboard. Our rugged computer could withstand the environment and be used for multiple job applications. With its small footprint, it was able to be stationed at each of the looms and dyeing and thread machines for use as a time clock and WIP tracking device.

thinENGINE Customer Success Story #3: What good is WIP Software if the hardware doesn't work? A major wheel manufacturer relied on WIP tracking to maintain a high level of efficiency throughout the plant. When their WIP hardware began to repeatedly fail due to environmental factors, it became a very serious problem.

Upon investigation, thinENGINE determined the cause of the hardware failure was metal filings and conductive materials in the air that caused the boards to short circuit. We brought in our Cyclone PC with fully-sealed enclosure and applied conformal coating (a chemical coating or polymer film that acts like a shellac and "conforms" to the circuit board) to the boards to protect the circuits from

contaminants and prevent build up. We also upgraded their keyboards to our industrial, sealed Typhoon model. Now they are able to run their WIP software without concern.

Maximize efficiency, accuracy and accountability with a WIP solution from thinENGINE Computer.

Call us today and get started on a custom solution to your unique needs!

(636) 257-2111

About thinENGINE Computer:
Since 1984, thinENGINE Computer by INDUCOMP Corp. has been providing custom hardware and software solutions to industrial markets. Based in Pacific, Missouri, we are one of the largest and only industrial computer manufacturers that design, fabricate and assemble products in the United States. thinENGINE manufactures more than 50 different models of monitors, industrial computers, keyboards and pointing devices. We have the capabilities to design, fabricate, manufacture, assemble and deliver custom products to meet your unique needs. To learn more, visit www.thinengine.com.