

# Kanban

**Automate the flow of materials using pull techniques.**

## Introduction

KANBAN, a technique for work and inventory release, is a major component of Just in Time and Lean Manufacturing philosophy. It was originally developed at Toyota in the 1950s as a way of managing material flow on the assembly line. Over the past three decades the Kanban process, a highly efficient and effective factory production system, has developed into an optimum-manufacturing environment leading to global competitiveness.

Kanban stands for Kan- card, Ban- signal. The essence of the Kanban concept is that a supplier, the warehouse or manufacturing should only deliver components as and when they are needed, so that there is no excess Inventory. Within this system, workstations located along production lines only produce/deliver desired components when they receive a card and an empty container, indicating that more parts will be needed in production. In case of line interruptions, each workstation will only produce enough components to fill the container and then stop. In addition, Kanban limits the amount of inventory in the process by acting as an authorization to produce more Inventory. Since Kanban is a chain process in which orders flow from one process to another, the production or delivery of components are pulled to the production line, in contrast to the traditional forecast oriented method where parts are pushed to the line.

In Just-In-Time (JIT) systems, the subassemblies and parts required for final assembly are pulled in small batches from the supplying work centres whenever they are needed. One of the most popular methods used for implementing JIT is through the use of Kanbans.

## Advantages of Kanban Processing

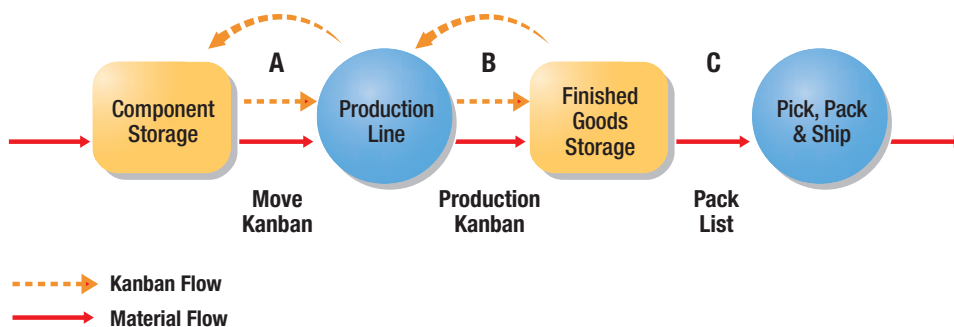
- Provides a simple and understandable process.
- Provides quick and precise information. There are low costs associated with the transfer of information.
- Provides quick response to changes. There is a strict limit of over-capacity in processes. Avoids overproduction. Minimizes waste. Full control can be maintained. Delegates responsibility to line workers.

## Kanban Processing in glovia.com

As part of our on-going commitment to provide the best manufacturing practices within glovia.com, we have introduced a new module encompassing the very best of Kanban techniques.

The monthly requirements are calculated using MPS, from this information using the KANBAN planning screen the number of KANBANS required are calculated.

When a shipment is due, pack lists and container labels are produced. For each container label the warehouse staff will select a full container from the warehouse (C). The production Kanban (B) is removed and both this and the container label are scanned. The details are



compared and the operator is only allowed to proceed if they match. The production Kanban is then placed near the production line onto the Heijunka Post as an authorization to produce another container of parts. When the Production line has finished producing a full container of parts, the production Kanban (A) is then placed in this container and moved to finished goods

storage. If preferred the production Kanban can update the production line FG stock and a move Kanban is used to move the stock to the finished goods storage.

So that data entry can be kept to a minimum, all Kanbans are produced with bar codes and the system is ready to accept data entry through scanners, etc.

<b>From:</b> Loc: <b>D-6-2</b> Bin: <b>A1</b>	Item No <b>76A071-0000L</b> Revision <b>0001</b>	<b>To:</b> Loc: <b>D-6-2</b> Bin: <b>A1</b>
	Description: <b>LCS (LH) 21061072</b>	
	Container type:      Container Qty. <b>PACDUN 0057</b> <b>5</b>	
Back No: <b>1072</b> 	Kanban no: <b>000119817</b> 	Customer <b>A1234567</b>

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