# KANBAN

## Automate the flow of material using pull techniques

Kanban, a technique for work release and inventory replenishment, is a major component of Just-in-Time (JIT) and Lean Manufacturing philosophies. Kanban was originally developed at Toyota in the 1950's as a way to manage material flow on the assembly line. Over the last three decades, the Kanban process – a highly efficient and effective factory production system – has become a widely used tool in the manufacturing environment and global competition.

Kanban stands for Kan- card, Ban- signal. The essence of the Kanban concept is that a supplier, the warehouse or the manufacturer should deliver components only when they are needed so that there is no excess inventory. Within this system, workstations located along production lines only produce or deliver desired components when they receive a card and an empty container, which indicates that more parts are needed in production.

In case of line interruptions, measures are taken so that each workstation will only produce enough components to fill the container and then stop. Kanban also limits the amount of inventory in the process by acting as an authorization to produce more. Since Kanban is a chain process in which orders flow from one process to another, the production or delivery of components is pulled through the production line. This is in contrast to the traditional make to forecast and make to order methods where parts are 'pushed'.

In JIT systems, when components and parts are needed for final assembly, they are pulled in small batches from the supplying work centers. One of the most popular methods used for implementing JIT is through the use of Kanban's.
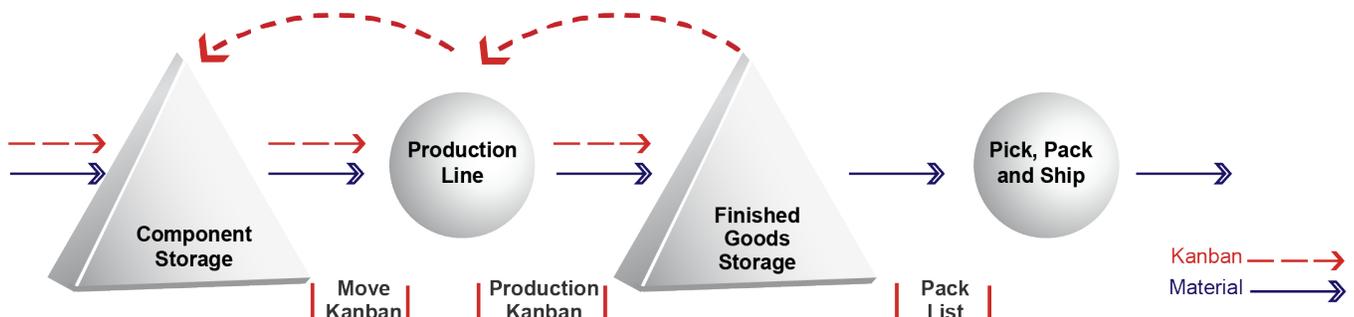
## On-Screen Dispatching

On-screen dispatching inquiries and reports provide factory supervisors with the information they need to control the production floor. This up-to-the-minute input provides a powerful tool for monitoring currently scheduled operations, work center loading and priority sequencing. It also provides the visibility into what needs to be completed in order to ensure a smooth and coordinated production flow.

## Advantages of Kanban Processing

- Provides quick and precise information
- Provides quick response to changes
- Avoids overproduction
- Minimizes waste
- Maintains full control
- Delegates responsibility to line workers

## Kanban Processing in GLOVIA G2

As part of our ongoing commitment to provide the best manufacturing practices within GLOVIA G2, we have introduced a solution that encompasses the very best of Kanban techniques. To help create as much flow as possible, monthly requirements are calculated using GLOVIA G2 Master Production Scheduling, which then relays information to a Kanban screen and generates the required number of Kanban's.

Referring to the above diagram, when a shipment is due, pack-lists and container labels are generated. For each label that is created, warehouse personnel will select a full container to go with each corresponding container label. In order to replenish the finished goods, a production Kanban is selected and scanned to match the outgoing container. After the operator compares and confirms a match, the production Kanban is then sent to the production line, via the Heijunka post indicating the need for another container of parts. When the production line (where the Kanban's reside) has produced a full container of parts, the production Kanban is placed in the matching container and moved to finished goods storage.

If preferred, the production line can also be updated by using a 'Move Kanban' to move stock through the production line and to component storage (A).

To keep data entry to a minimum, all Kanban's are produced with bar codes and the system is ready to accept data entry through scanners or other means.

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

Fujitsu Glovia, Inc.
2250 East Imperial Highway, Ste. 200
El Segundo, CA 90245-3457
Tel: +1 800 223-3799
+1 310 563-7000
Fax: +1 310 563-7300
Email: marketing@glovia.com
*www.glovia.com*

FUJITSU

FUJITSU GLOVIA, INC.