

Kanban



What is Kanban?

Kanban (jap. card, signal) is a method to manage the material flow of a company.

In general there are two ways to manage planning and scheduling in a production environment: "Push" and "Pull".

In a "**Push system**" a plan will be created for each production step, mostly based on forecast data. Each production step will produce exactly what has been planned. When the parts have been produced, the material will be "pushed" to the next production step.

In a "**Pull system**" the customer (consumer) sends a signal to the supplier (producer) what must be produced. The material will be "pulled" from the end of the supply-chain. By using this method normally so called "self-controlling loops" will be used. This means only parts will be produced and delivered which have been consumed completely. These information will be sent via "Kanban signals".

Kanban Systems normally have the following characteristics:

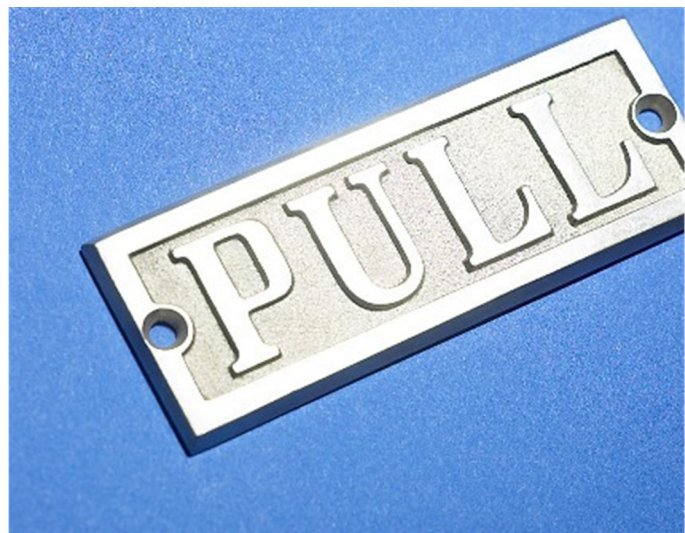
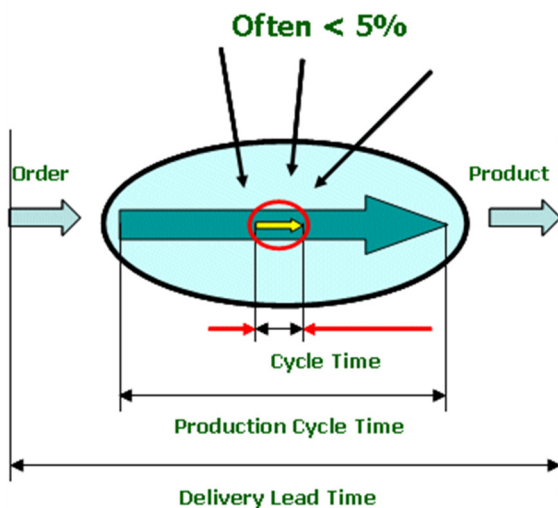
- > Only parts which have been used will be re-produced (no Kanban signal, no production starts)
- > Only the exact number of consumed parts will be produced again (not more, not less)
- > The number of parts in a Kanban container is exactly defined
- > All parts must be delivered back to the consumer in a predefined timeline (delivery lead time)
- > Only good parts will be delivered from the supplier to the customer (100% quality)

What are the objectives of implementing a Kanban system?

- ✓ Reduction of inventory
- ✓ Improvement of delivery lead times and delivery reliability to the customer
- ✓ Reduction of internal production cycle times
- ✓ Increasing of inventory turn overs (ITO)
- ✓ Improvement of productivity in the areas of purchasing, procurement, planning and scheduling
- ✓ Increasing of flexibility on new market requirements
- ✓ Increasing of material availability
- ✓ Continuous improvement of the complete performance and improvement of cash-flow situation

Which results of improvements can be achieved?

- > Reduction of inventory about 20 – 80%
- > Reduction of production cycle time about 10 – 90%
- > Increasing of inventory turns about 30 – 100%
- > Increasing of delivery reliability up to > 98%
- > Reduction of needed floor space about 10 – 80%
- > Increasing of material availability up to 100%
- > Reduction line-stoppages and material shortages down to 0%
- > Reduction of required time for planning and scheduling about 50 - 80%



Please contact us for a Kanban presentation!

About manufactus

manufactus designs and develops innovative software solutions to optimize production and logistic processes.

Our goal is to supply software tools to support internal production processes, optimize the supply chain and to enable the customer to improve the processes continuously. Hereby we strongly support the principles of Lean Manufacturing, Kanban and the Toyota Production System.