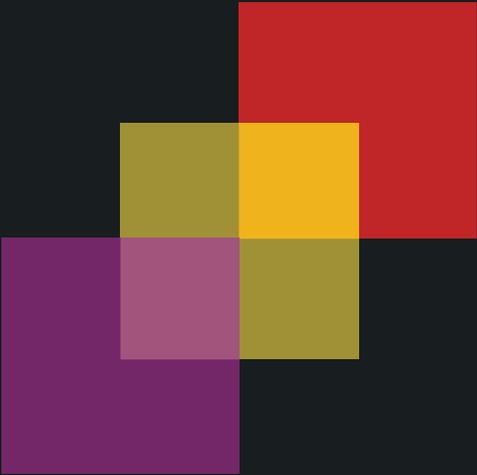




Science of Supply Chain. **DELIVERED**



# HOW IMPROVEMENT IN KITTING OPERATIONS IMPROVED REVENUES BY 28 TIMES FROM A SINGLE UNIT



## The Context

After sales spare parts business is always profitable if the inventory is sold as kits and not as individual for selected items.

## The Problem

India's largest manufacturer in Indian automotive industry wanted to consolidate the kitting operation from multiple locations to single location. They also wanted to ensure that all the kits required in the market were manufactured in advance to fulfill the demand and avoid sale loss due to non-availability. The problem was discussed with FSC and quick solution was required to set things in place.

## The Solution

### FSC Approach

- The FSC Solutions Design team spent several days in their kitting centres' understanding their current operation.
- A complete understanding of the kind of kits to be manufactured was obtained which included material flow and process flow
- The bottlenecks analysis for the existing kitting operation was done to find out the improvement areas
- Product profiling using Pareto analysis was done to define fast moving, slow moving kits.
- Further component analysis was done to know and decide the future processes
- Individual components unit cartonisation needs were studied and Ratios of unit cartonisation were finalized where ever required
- Entire order cycle was studied in detail
- Wastage analysis was done

*Study indicated a need to change the current kitting processes, system transactions and material flows to get the required efficiency and productivity. Also the need for a centralized kitting location to manage all India requirements was identified.*

### FSC SOLUTION

The entire method and processes were re-defined to fulfil the auto major's business need of demand fulfilment with lower Cost- to- Market and Lesser Time- To- Market

- A centralised location in Nagpur was identified since it could meet all India requirements without impacting cost.
- Time Motion Study was done to define production time and efficiency on the basis of the type of Kits. Manpower Requirement was also defined.
- New IT & Automation processes were identified and implemented to improve work flow and visibility.
- Layout of the kitting unit at the warehouse was re-designed to enable handing of high throughput and complexity due to variety of kits

## The Outcome & Impact

- 100%Availability of Kits in the warehouse as per projected demand
- Kitting Efficiency increased by 100%
- Daily manufacturing of kits shot up by 350%
- Growth in Kits sale by 100%

## Additional Information

### What is Kitting? And its advantages

Consolidating individual but related items together in a single packing unit is called kitting. Alternatively, the practice of delivering components in pre-determined quantity and ratio in a specific container is called kitting.

Kitting has many advantages, of which few are listed below

- It increases profitability of manufacturer as instead of individual unit, kits get dispatched to distributor and assembly lines.
- The hidden benefit of kitting is improved cash flow. As you diminish the inventory holding, it automatically improves the cash flow.
- Increased Warehousing/Manufacturing efficiency due to reduced time of looking for parts as well as reduced packaging disposal
- Reduced costs due to less parts handling, labour and warehousing space
- Provide cleaner working area and fewer items at point of use

### Typical Kitting Units

