Projects: Consultancy for improving the materials flow, information flow and warehouse activities for raw materials and finished goods

Client: important manufacturer of Automotive components

Project objectives:

1) Validation of the materials flow proposed by the client in the warehouses (raw materials and finished goods) and providing guidelines for adjust this flow, using VSM

2) Implementation of 6S in the warehouse

3) Evaluation Implementation of scanning

4) Implementation of FIFO for materials

5) Storage space optimization

6) Increase the inventory accuracy

7) Definition of Measurable KPIs for the warehouse

Initial situation:

Our client manufactures a wide range of safety critical systems for the Automotive industry, for a large number of customers. The production department must manage a high product mix and prototypes as part of the NPI process. The main customer is an internal customer (main distribution warehouse) and a smaller part of the production is delivered directly to the car manufacturers. For this reason, there are very large stocks of finished products in the warehouse, the factory being used as a buffer warehouse between the market and the main warehouse. The high volatility in the forecast creates uncertainties regarding raw materials, which has led to excessive inventory levels.

Main activities:

1. Evaluation of the entire information and operational flow in warehouses

2. Measuring activities, creating VSM for warehouse processes, identifying points for improvement and proposing solutions

3. Evaluation of 6S in the warehouse, creation of action plans, implementation of actions and establishment of 6S in warehouses with KPIs

4. Assessment of the scanning implementation and presentation of proposed solutions and their benefits to the client

5. Design and presentation of FIFO implementation plan for materials

6. Implementation of a tool to measure space utilization efficiency, along with a proposal to introduce safety stocks and Min/Max levels at item level for all customer materials

7. Development and implementation of a tool for warehouse stock arrangement based on material usage frequency

8. Evaluation of inventory by scanning, definition of critical parts, cycle count, inventory results analysis sheet to find the root cause of problems in case of inventory discrepancies.

9. Definition of measurable indicators (efficiency per day, shift, operator, stock level, production delivery times, etc.) – development of indicators calculation, implementation and evaluation program

Results:

1. 6S – initial result 27% - final result >90%

2. VSM Raw Materials – Improvements: reductions more than 25% of the time dedicated to warehouse activities

3. VSM finished products – Improvements: reductions more than 20% of the time dedicated to warehouse activities

4. FIFO – proposals for the implementation of new equipment and procedures: 75% increase in storage space

5. Warehouse space optimization – after implementing solutions: decreasing the "forklift" time by 35%. Proposals for solutions for warehouse rearrangement: increased storage space by 78% in the raw materials warehouse and 45% in the second warehouse