

## Performance Enhancement of Autopart Manufacturing Industry Using Lean Manufacturing Strategies: A Case Study

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**Abstract :** Today, the manufacturing industries respond rapidly to new demands and compete in this continuously changing environment, thus seeking out new methods allowing them to remain competitive and flexible simultaneously. The aim of the manufacturing organizations is to reduce manufacturing costs and wastes through system simplification, organizational potential, and proper infrastructural planning by using modern techniques like lean manufacturing. In India, large number of medium and large scale manufacturing industries has successfully implemented lean manufacturing techniques. Keeping in view the above-mentioned facts, different tools will be involved in the successful implementation of the lean approach. The present work is focused on the auto part manufacturing industry to improve the performance of the recliner assembly line. There is a number of lean manufacturing tools available, but the experience and complete knowledge of manufacturing processes are required to select an appropriate tool for a specific process. Fishbone diagrams (scrap, inventory, and waiting) have been drawn to identify the root cause of different. Effect of cycle time reduction on scrap and inventory is analyzed thoroughly in the case company. Results have shown that there is a decrease in inventory cost by 7 percent after the successful implementation of the lean tool.

**Keywords :** lean tool, fish-bone diagram, cycle time reduction, case study

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