

Lean Manufacturing

A Tool for Improvement

Lean manufacturing is a generic process management philosophy derived mostly from the Toyota Production System (TPS) and was identified as "Lean" only in the 1990s. The steady growth of Toyota has focused attention on how it has achieved this through lean. The mainstay of lean principles is to simplify, standardize and structure processes and practices. Lean can be defined as a production practice that considers the expenditure of resources for any goal other than the creation of value, for the end customer, to be wasteful, and thus a target for elimination.

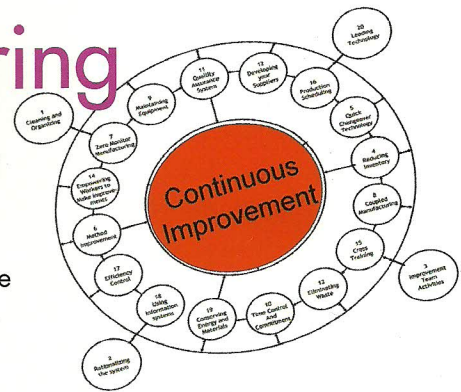
Lean manufacturing is a system full of challenges.

It challenges inefficiencies of the system and the thinking patterns of the people. Lean is a culture that has to be developed and the greatest investment that it requires is in time and people. It cannot be copied - what works for one might not work for the other. Although lean manufacturing is a massive change to the process in short term, long term it will build a system which is stable and simple. The key is to be patient and get involved.

Lean manufacturing processes can improve material handling. There is fewer movement of material, short travel distance in storage areas and simple picking method. This contributes to saving in inventory and improvement in quality. By using smaller lots quality issues can be handled at the time of manufacture but if lots are big quality issues may not be identified until late into the process and can be costly to correct, both in time and resources. All these improvements lead to more successful manufacturing operation, reduced cycle time, increased productivity, reduced incidence of reworking, returns and customer complaints.

According to lean, complexity is built by 3 types of wastes - muda ("non-value-adding work"), muri ("overburden"), and mura ("unevenness"); and identification and elimination of waste through various lean tools can expose problem areas and rectify them. By adopting lean

manufacturing processes the waste can be reduced to around 25-35%.



The garment industry needs to move from 'make and sell' to 'business sense'. Instead of producing without identifying needs and to just keep employees occupied, the requirement is to manufacture and deliver what is needed, with right quality and at the right price. Profits need to sustain and grow. The aforesaid is hindered by complexity.

Lean requires a "kaizen mind", meaning that everyone becomes a problem detector and a solver to eliminate any bottleneck and promote continuous flow in processes and production.

The success of Lean lies in "Cultural Shifts" as the Lean philosophy believes in team efforts and once the same is achieved all kinds of efficiencies in the system are obtained as a direct consequence. Although lean has predominantly been associated with the Automobile and instruments sector, it is extremely positive to note that eminent Garment clusters along with its 10 member SPV are showing keen interest in putting their foot forward and upgrading the existing industry norms.

Fashion Futures, a consultancy firm, headed by its young and dynamic Director, Ms. Pooja Makhija, has been aiding companies to adopt lean manufacturing systems designed according to individual company profiles. Ms. Pooja, a lean certified practitioner along with her team of experienced professional is already implementing the lean scheme in Ludhiana and Jaipur garment cluster.



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