



Lean Manufacturing

What is Lean Manufacturing ?

Lean manufacturing is a production system which requires less in terms of all inputs & resources. The basic ideas behind lean manufacturing are waste elimination and the enhancement of flow.

Waste, or non value added activities, is anything not absolutely necessary to produce the product. The elimination of waste facilitates maximizing or fully utilizing activities that add value from the customer's perspective. Value is everything that the customer is willing to pay for in the product.

The elimination of waste will only be successful & sustainable in the long run if all employees get involved in learning to see waste and subsequently the elimination of waste. Flow enhancement is the other cornerstone of any lean transformation. In order to enhance the flow, there is, among others, a need for staff to be flexible both up and down a process and across different processes. This again brings the important success factors of any lean initiative to the surface, employee involvement and empowerment.

Issues that can be solved using the Lean Manufacturing methodology:

Examples of some recently completed projects by Stanwick give an idea about the effectiveness of the Lean Manufacturing methodology :

- Reduction of set up times in order to decrease batch sizes and increase customer responsiveness within a plastics manufacturing company.
- Manufacturing lead time reduction and flow creation within a furniture manufacturer.
- Installation of a visual production control system, using FIFO lanes and kanban, in order to facilitate shop floor planning & scheduling within a second tier automotive supplier.

How to implement Lean Manufacturing ?

Any lean transformation starts with the drawing of a current state value stream map. The purpose of a value stream map is to look at the flow of a key process from start to finish. The value stream map shows both the flow of the physical product being processed and the information flow directing the scheduling and production of the product.

The aim to produce a value stream map is both to understand the process and look at it end to end. It is more than process mapping, since a value stream map visualizes the parameters that will be used to improve the process. Data collection and value stream mapping go together since we need facts & figures for later analysis and decision making. Taking into account the whole flow of a product also limits the risk that later improvements in one area will be at the disadvantage of improvements in another area.

The current state map, detailing how every step is performed and how they relate to one another, gives an idea about the causes of the problems and thus a means to improve the flow by eliminating waste. The application of the lean principles, tools & techniques are at the core of these improvements. Cycle time reduction, setup time reduction, reducing batching, moving away from a

push to a pull situation, defining new work standards, ... are only a few lean tools that can be used to achieve an improved situation.

Once all possible improvements have been identified, a future state map can be drawn up, illustrating how the process will operate in the future.

Going from the current state to the future state will most often be done by a series of blitz kaizen workshops. These are one week workshops, aimed at implementing and securing well chosen improvement actions, making the process better each time and aligning it with the future state map. The ability to run successful blitz kaizen events will depend on the lean sensei guiding the events and his or her ability to successfully involve the people, empower them and make them enthusiastic about the change process. Sole technical expertise will not be sufficient to make a lean transformation successful !

The Role of Stanwick in the implementation of Lean Manufacturing:

Stanwick has more than 15 years of experience in assisting & coaching companies in different industries in making the lean transformation. Stanwick's lean sensei's, trained in Japan, ensure that your lean transformation does not merely become an implementation of tools and techniques, but keeps and honors the objectives of increased customer responsiveness, reduced lead times, standardized ways of working, cost reduction, simplified shop floor scheduling, empowered employees engaged in continuous improvement, ...

Stanwick can assist your company in :

- The execution of lean assessments to identify the potential of your production system. By doing so, we gain insight in your business and analyze your current manufacturing strategy. Through value stream mapping, we identify the major improvement levers.
- Setting up an implementation plan together with local management.
- The organization of awareness sessions in order to mobilize key players. We use a simulation exercise, the Lean Manufacturing Game, to create an insight in the basics of Lean Manufacturing.
- Providing in house training sessions on lean manufacturing. Basic, advanced and tailored courses are available.
- The execution of hands-on kaizen workshops ranging from work cell development over kanban kaizen to production preparation process workshops.
- The organization, monitoring and reporting of the progress of the lean transformation to the management.

What are the results you can expect from the implementation of Lean Manufacturing ?

Stanwick has supported valuable projects for its customers with improvements in several areas. Some examples of recently concluded customer project & results illustrate this :

- Increased customer responsiveness and 60 % reduction in leadtime through the implementation of single piece flow within a supplier to the food industry.
- Implementation of a kanban shop floor scheduling system within a consumer goods company, bringing down work in process levels with 40 % while ensuring a 99% service level.
- 20 % productivity increase year after year for the last five years through the implementation of work cells and a standardized work approach in an industrial equipment company.

Some recent client engagements in Lean Manufacturing:

Alcon, Bekaert Group, Bombardier, Nedtrain, Parker Filtration, Swedish Match, Hansen Transmissions.

Stanwick Management Consultants, your partner in organisational & operational excellence.

Stanwick is an independent management consulting firm that supports companies to achieve business excellence by improving their organisational and operational performance. We have offices in Belgium, the Netherlands, France and China.

The aim of our customers, active in industry, as well as in services and public sector, is to excel in bottom-line results, employee satisfaction, customer satisfaction and the impact on society. Stanwick's mission is to help them to achieve these goals through its in-depth expertise, by creating a close partnership and through continuous support to the organisation as a whole.

As a partner on the way to excellence, we develop a tailor-made approach with the appropriate tools together with the customer. We put a lot of emphasis on implementation, leading the process of change and getting sustainable results. We have in-depth knowledge in both organisational and operational excellence.

Our team consists of 35 full-time consultants with very different backgrounds ranging from engineers and psychologists to economists and sociologists.

Contact us to find out how we can support you in your way to excellence.

Please do not hesitate to contact us for discussing how we can help you in your lean journey. Sample cases and a select set of training modules are available upon request for your evaluation.

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