

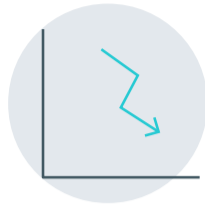
You would use this approach as part of the design of your manufacturing process and material replenishment systems.

Projected performance gains



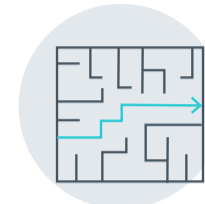
Improved

- Working environment
- Safety
- Efficiencies
- Product quality



Reduced

- All of the 8 lean wastes
- Lead times

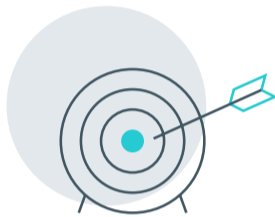


Simplify

- The flow of production information

What investment is needed to understand the concept?

DIFFICULTY



Medium

Requires some reading around the subject and a structured approach

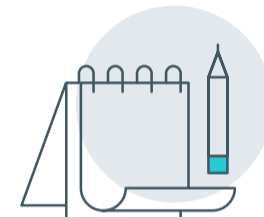
ACTIVITY



Team

Best results come from a team of Engineers, Assembly Operators and Material Handlers

EQUIPMENT



Some

Conveyors, Benches, Racking, Tote bins and more. This depends on the nature of the process, parts or products.

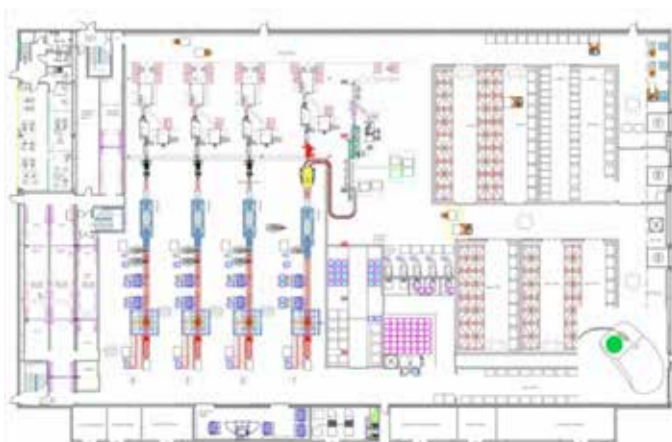
Explanation of the concept

Factory layout has a significant effect on the performance of the whole manufacturing system and the day to day working experience of employees. The opportunities to influence and improve factory layout can come in a number of ways:

- Day to day Continuous Improvement activities/Kaizen events
- Introduction of a new product/process/machine
- Move into a new premises
- Expansion of an existing premises

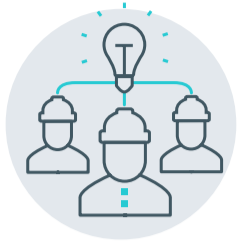
Unfortunately, many companies do not take advantage of these opportunities and pay the price of having a poor layout every day. The best layouts are generated by teams of people who use the work areas. The roles in these teams can be:

- **Engineers** – bringing the understanding of the equipment set and technical aspects
- **Assembly Operators** – bringing their knowledge of the best ways to assemble the product
- **Material Handlers** – bringing their experience of feeding the production area with materials and taking away finished products



Example of a factory layout

What action should I take?



1

Gather together a group of Engineers, Operators and Material Handlers



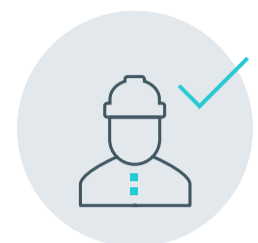
2

Understand the likely sales demand or run rate for the production area



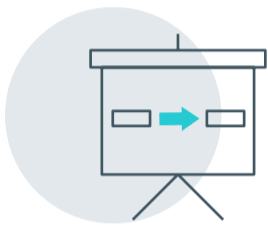
3

Share the concepts of the 8 lean wastes and how the layout needs to reduce these



4

Make the inherent safety of the work area a key consideration of the layout design



5

Use a paper process with large A1 print-outs of the area – draw up scale machines and racking



6

Consider the existing or potential location of services – compressed air, power, water, drains, air/fume extraction



7

Put together at least two or three layout designs and then compare them to each other using the 8 lean wastes, safety considerations and investment costs as a guide



8

Make a collective decision on the best way forward

Recommended reading



Suzaki, K. (1987). *The New Manufacturing Challenge*. The Free Press. ISBN 0-02-932040-2



Rother, M. & Harris, R. (2001). *Creating Continuous Flow*. The Lean Enterprise Institute. ISBN 0-9667843-3-2

Factsheet 7 Value add and the 8 wastes

Glossary

Kaizen – a small improvement for the better

Kaizen Event – a team based problem solving and continuous improvement activity focused on a specific product, process or issue

8 lean wastes – wasteful activities that can be found in any production process and targeted for reduction

Run rate – using current production performance to predict future performance over a period of time

For more advice, case studies and additional factsheets visit:
www.businessgrowthhub.com/manufacturing