Operational excellence

Lean Manufacturing: Fundamentals and the 7 Wastes

Two days to learn to see waste where it actually is, on your lines and in your logistics flows. The seven wastes, flow, cycle time and takt time are explained and then measured during a shop-floor diagnostic in your plant. Supervisors leave with a plan of improvement workshops ranked by impact and effort, ready to launch.

Duration : 2 days

Objectives

1. Explain the principles of Lean: customer value, flow, producing only what is needed, continuous improvement
2. Identify the seven wastes on a production line or in a warehouse
3. Measure the cycle time, takt time and value-added share of a flow
4. Run a structured shop-floor diagnostic on a line in your plant
5. Build a workshop plan prioritised by impact and effort

Programme

Day 1 — morning

• Origins and principles of Lean: value as seen by the customer, flow, producing only what is needed
• The seven wastes: overproduction, waiting, transport, over-processing, inventory, motion, defects
• Examples in agri-food, packaging, logistics and mechanical engineering
• Quiz: spotting waste in photos and videos of workshops

Day 1 — afternoon

• Production flow: work in progress, bottleneck, lead time
• Cycle time, value-added time, takt time: definitions and calculations
• Balancing a line against takt time
• Preparing the diagnostic: observation grid, timing, observers' roles

Day 2 — morning

• Shop-floor diagnostic on a line in your plant, in sub-groups
• Recording the waste observed: photos, timings, distances travelled
• Measuring work in progress and the line's lead time
• Discussions with the line's operators and supervisors

Day 2 — afternoon (workshop)

• Workshop: summary of the diagnostic and estimate of the losses observed
• Impact / effort matrix and choice of first workshops: 5S, SMED, problem solving, standardisation
• Workshop plan: pilot, team, deadline, result indicator
• Knowledge test and presentation of the diagnostic to site management

Teaching methods

• Classroom line simulation played in several rounds to measure the effect of each improvement
• A full half day on the shop floor, in your plant
• Timings and observations carried out by the participants themselves
• Presentation of the diagnostic to management at the end of the course
• Trainers who are consultants running Lean projects in companies

Assessment and documents

Knowledge test, end-of-course evaluation at D+1, numbered training certificate verifiable online, training report. The company also receives the diagnostic of the line studied and the prioritised workshop plan.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

This course opens the « Operational Excellence Cycle »: diagnostic, Lean fundamentals, 5S pilot workshop, SMED and sustainability audit, in 4 sessions spaced 15 days apart, 9 days over 2 months.

Practical information

Duration	2 days
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

Does the training take place in our plant?

Yes. The day 2 diagnostic is carried out on one of your lines: allow for access to the workshop, protective equipment and the availability of the line team for half a day.

Does Lean apply to logistics?

Yes. The seven wastes are found in a warehouse too: repeated handling, waiting at the dock, idle stock, reworked order picking. The diagnostic can cover a logistics flow rather than a production line.

What is the difference with the VSM course?

This course teaches you to see waste and launch workshops on a line. The « Value Stream Mapping (VSM) » course follows the whole flow of a product family, from order to shipment, to draw the current state and the future state.

Can this course be funded?

It can be included in the training plan submitted under OFPPT special training contracts (CSF), according to the rules in force. We prepare the file with you; eligibility depends on your company.