



## Solutions in Operations

*How do you design,  
manage, and improve your  
key products and work  
processes?*

*How do you ensure effective  
management of your  
operations?*

# Lean Overview with Simulation

Lean Manufacturing encompasses a set of continuous improvement techniques that, when implemented, shorten the time between customer order and shipment by eliminating or reducing non-value added activities. One effective approach to capturing the power of Lean is IMEC's signature Lean Simulation. Working for "Buzz Electronics" (a mock manufacturing facility), participants assemble a product on a simulated factory floor, incorporating the various principles of Lean along the way. By participating in a Lean Simulation, you experience how to use half the manufacturing space and half the effort to produce products in half the time with fewer defects.

### **SIMULATION OBJECTIVES**

This full-day program combines a comprehensive classroom presentation with hands-on simulation of a production facility. In this workshop, we introduce the basic concepts of Lean manufacturing and demonstrate the tools and methodology necessary to implement "lean" on the shop floor.

Participants act as production workers, applying the lean tools to their individual workspaces as well as across the entire product line. This learn-do technique over four "shifts" illustrates cause and effect relationships for the lean tools presented. Participants review methodology and lessons learned from previous shifts, deciding what and how to implement while working with realistic constraints such as available resources, cash flow and resistance to change.

Each participant will receive a "Principles of Lean Manufacturing" workbook and a certificate of workshop completion (upon request).

### **TOPICS COVERED**

- Traditional Manufacturing
- Defining Lean
- Eight Wastes
- Standardized Work
- Total Productive Maintenance
- Visual Controls
- Workplace Organization (5S+1)
- Plant Layout
- Quick Changeover
- Point of Use Storage
- Quality at the Source
- Pull Systems
- Cellular/Flow Manufacturing
- Batch Size Reduction
- Takt Time
- Work Balancing
- Keys to Success

### **BENEFITS OF THE LEAN MANUFACTURING OVERVIEW**

Participants will learn how to identify the eight wastes in manufacturing and experience how productivity can be improved by applying standard work, visual controls, quick changeover, batch size reduction, point-of-use storage, quality at the source, pull systems and more

### **WORKSHOP DETAILS**

Duration: 8 hours  
Class size: 14 - 20

For more information, contact IMEC at 888-806-4632 or [info@imec.org](mailto:info@imec.org).

