Cellular/Flow Manufacturing

Cellular/Flow Manufacturing is the linking of manual and machine operations into the most efficient combination of resources to maximize value-added content while minimizing waste. The most efficient combination implies the concept of process balancing. When processes are balanced, the product flows continuously, parts movement is minimized, wait time between operations is reduced, inventory is reduced, and productivity increases.

WORKSHOP OBJECTIVES
This hands-on Workshop demonstrates how to link and balance manufacturing operations to reduce lead times, minimize work-in-process, optimize floor space utilization, and improve productivity. Participants are led through a 5-step process for designing and implementing work cells, using a live simulation. This process applies to both assembly and machining applications. This group training exercise is designed to precede a Cellular/Flow implementation, or Kaizen event.

• Understand the characteristics and benefits of cellular manufacturing
• Group manufactured products into product families
• Establish Takt Time for a product family
• Conduct a review of a work sequence
• Combine work to balance a production process
• Design an effective cell layout

TOPICS COVERED
• Defining Lean
• Eight Wastes
• Five Step Cell Design Process
• The Product/Process Matrix
• Takt Time
• Tools for Cell Design and Kaizen
• Work Balancing/Combination
• Cell Design and Construction
• Cellular Manufacturing Case Studies
• Plant Layout Consideration
• Keys to Success
• Performance Impact and Benefits

KAIZEN EVENT
IMEC will facilitate a group of your employees through the Cellular/Flow process, implementing the techniques learned in the workshop. The team will redesign a process in such a way that it will result in substantial improvements in most, if not all process performance measures. When circumstances allow, the new process will actually be implemented and the results verified. When not possible, the team will have developed: a layout of the proposed process; projected performance measures for the new process; an implementation plan and an actions item list. Approximately 50% of all events result in actual physical changes by the end of the Kaizen Event. Normally, everything cannot be implemented during the two or three day Kaizen event. Therefore, the team will develop an action plan with assigned responsibilities and expected completion dates to insure that the necessary follow-up takes place.

BENEFITS OF CELLULAR/FLOW MANUFACTURING
An efficient flow-through manufacturing system will eliminate waste, minimize work in process, optimize floor space, reduce lead-time, and improve customer response time, leading to reduced costs and greater production capacity.

WORKSHOP DETAILS
Duration: 6 hours
Class size: 8 to 15

KAIZEN (INCL. TRAINING)
Duration: 2-3 hours
Class size: 6 to 12

For more information, contact IMEC at 888-806-4632 or info@imec.org.