OKUMA

Creating Competitive Advantage through Advanced Manufacturing

Course Code: AM-501
Prerequisite: None
Credits: 3.2 CEU
Course Length; 4.5 days
Class Size: Maximum of 12
Price per Student: $1,750
Location: Partners in THINC
12428 Sam Neely Road
Charlotte, NC 28278

Course Description:
Discussion of many of the challenges that face Manufacturing firms today. The class covers and demonstrates tools that today's manufacturing companies can apply to reduce their operational costs. The course is loaded with practical applications that management can utilize each day.

This course will provide insight into potential solutions to common problems/hurdles faced by machining related manufacturing companies each day.

Learning Objectives:
Students completing this course will be able to:
1. Understand the available methodologies and technologies for Machining related Manufacturing
2. Understand how to obtain accurate and timely information from the shop floor
3. Understand the various types of information needed to make the best decisions
4. See and discuss available technologies from multiple leading technology companies

Targeted Audience:
Operations Management, Information Technology Professionals, Manufacturing Engineers, Cost Accounting, Manufacturing Manager/Supervisor, Quality Manager and Engineers, Project Management, Purchasing and Planning Professionals

Text:
An outline of each PowerPoint slide, with available space for notes and comments, will be provided to each attendee.

Attendee Evaluation:
Comprehension of the topics will be evaluated by observation of the instructor and through class discussions.

CLASS AGENDA:

Monday

1. Instructor and Class Introductions
2. Lean Manufacturing – What is it? How does 5S apply?
3. Process Measurements
4. Bottlenecks and Constraints
5. Why is it important to reduce/eliminate set-ups and change-overs?
6. How do you reduce set-ups and change-overs?
7. How effective is a process? Are we making money?

Tuesday

1. Flowcharting
2. Process Types
3. Make it or Buy it?
4. Things to consider in a work place layout
5. Waiting Lines - How to avoid the "slow" line

Wednesday

1. Quality control – Should we add more inspections?
2. Cost of Quality – What is this?
3. DMAIC cycle – 6 Sigma - PDCA
4. Control Limits and Specification Limits – What's the difference?
5. In-control and Out-of-control – Which defines your process?
6. When are adjustments necessary and why?

Thursday

1. MRP and ERP Systems
2. Supply Chain – How does this affect cost?
3. Outsourcing & Insourcing – When to do both?
4. Capacity Planning – Do you ever say NO?
5. Forecasting Demand
5. Project Management – How do you measure?

Friday (1/2 day)

1. Inventory Control – When to reorder?
2. Bill-of-Materials and ABC analysis
3. Robotics – Are they flexible? When do you use them?
4. Scheduling – What should we do first?