

Quality Standards Training

Spartanburg Community College Corporate and Community Education Department, in partnership with South Carolina Manufacturing Extension Partnership* (SCMEP) and independent consultants, offers leading-edge, professional training to enhance the skills, techniques and knowledge to achieve industry goals. The following classes are available by request. **Contact us at 864-592-4900.**

■ **LEAN 101: INTRODUCTION TO LEAN MANUFACTURING PRINCIPLES**

5S: 5S is a series of activities designed to improve workplace organization and standardization. These activities include:

- **Sort** through all items and remove unneeded items from work area.
- **Set** in order remaining items, set limits, and create temporary location indicators.
- **Shine** or clean everything and inspect while cleaning.
- **Standardize** work areas so the same procedures and abnormalities are obvious — standardize best practices
- **Sustain** the rules and procedures by internalizing them making them habits

Sustain the gains through self-discipline, training, communication, and total employee involvement. The benefits of 5S:

- improve quality
- decrease changeover time
- reduce storage costs
- machine down time
- achieve work standardization
- improve safety
- cycle time
- boost employee moral as well as work environment.

5S OVERVIEW

Can a stranger identify in five minutes your organization's vision, mission and the key performance measures without your speaking a word? Learn about organizing your environment for maximum productivity and profit, the theories behind 5S principles, streamlining your workflow, implementing and sustaining the 5S methodologies. Practice on real world examples and apply them to your own organization.

5S TRAINING

This workshop offers you an opportunity to experience firsthand how the 5S System reduces waste in a simulated production facility. Participants learn the concepts of the 5S System and then apply them to transform a cluttered, disorganized production area into a clean, organized, and orderly workplace.

■ **KAIZEN**

Kaizen is an intensive and focused approach to process improvement. A Kaizen Blitz is a continuous improvement event that uses Lean tools, a team approach, brainstorming, and problem solving to quickly improve a specific area or situ-

ation. Conducting a Kaizen event provides immediate, tangible results and motivation for ongoing continuous improvement.

■ **KANBAN**

Kanban, a device for indicating the need to replenish materials, controls the flow of resources during a production process and replaces only what has been consumed by the customer, thus delivering the right amount of material to the right place exactly when it is needed. Learn how to implement a pull system based on actual customer demand and consumption rather than forecasting.

■ **VALUE STREAM MAPPING**

Value Stream Mapping, a powerful tool used to map the material and information flow of a product family, identifies and quantifies the waste reduction opportunities from receipt of raw materials through shipping as finished products. The process includes physically mapping your "current state" and systematically defining a lean "future state." Taking a value stream perspective means working on the big picture, not just individual processes, and improving the whole, not just optimizing the parts.

■ **CELLULAR/ FLOW MANUFACTURING**

Cellular Manufacturing is the linking of manual and mechanical operations into the most effective combination of resources to maximize value-added content, while eliminating or minimizing waste. The most efficient combination results in process balance for continual product flow. As a result, parts movement is minimized, wait time between operations is reduced, inventory is reduced while productivity and quality increase.

■ **TOTAL PRODUCTIVE MAINTENANCE**

Total Productive Maintenance (TPM) is a team-based initiative for optimizing the effectiveness of manufacturing equipment. TPM addresses the entire production system life cycle and builds a concrete, shop floor-based system to prevent all losses. Its aims include the elimination of all capacity losses to maximize your Overall Equipment Effectiveness (OEE).

■ **TRAINING WITHIN INDUSTRY (TWI)**

Training Within Industry, utilizing a learn-by-doing approach to teach essential skills to supervisors and team leaders, consists

of three core programs modules that feature a proven four-step methodology of Preparation, Presentation, Application and Testing.

■ CONSTRAINT MANAGEMENT

Theory of Constraints (TOC) is a management philosophy that enables systems to achieve higher performance in relation to their goal. Our training encompasses the basic Theory of Constraints, categories of constraints, and the focusing steps utilized to improve system throughput.

■ LEAN OFFICE

In this class Lean principles are applied to administrative processes to streamline information flow – the gathering, improving, movement and storage of information. By properly implementing and sustaining Lean Office techniques, companies can design a Lean Office environment that is effective, efficient, requires less effort and generates measurable benefits.

■ SIX SIGMA

Six Sigma is a measure of quality that strives for near perfection. It is a statistically driven methodology for eliminating defects and reducing variation in both products and processes. This proven DMAIC (Define, Measure, Analyze, Improve, Control) methodology uses data to identify and execute improvement projects.

GREEN BELT — Green Belt trainees learn basic quality tools used in the DMAIC methodology and typically operate under the project leadership of a Black Belt.

BLACK BELT — Black Belt trainees use the quality basics of green belt training and learn the statistical analysis necessary to complete Six Sigma projects as well as project leadership.

■ INTERNAL AUDITING

ISO 9001:2000 INTERNAL AUDITOR

This course, designed to train internal auditors for a general understanding of service, covers the requirements of the ISO 9000 standard and methods and applications of the process audit.

OHSAS 18000 INTERNAL AUDITOR

This two-day course is designed to prepare internal auditors to audit safety compliance and safety systems of a company. The

course covers the requirements of the OHSAS 18000 standard and includes audit planning methods and activities.

TS16949:2009

This course, designed to train internal auditors, covers the requirements of the TS standard and methods and applications of the process audit.

ISO 9000, Quality Management

QS 9000 / TS 16949, Automotive Industry Supply Standard

AS 9100, Aerospace Industry Supply Standard

■ CORRECTIVE ACTIONS / PROBLEM SOLVING

8D METHODOLOGY

8D is a problem solving methodology for product and process improvement. It is structured into eight disciplines, emphasizing team synergy – the team as a whole is better and smarter than the quality sum of the individuals.

A3 PROBLEM SOLVING

A3 is a storyboard and is used for problem solving, project reports and proposing policy changes – each complete with a storyline detailing the analysis and thought process behind it.

ROOT CAUSE ANALYSIS

This course is designed for anyone who needs to improve their problem solving skills to enhance the corrective action process. It includes a systematic approach to the analysis of problem solving using case studies to walk participants through brainstorming and analytical thought processes needed for an effective solution.

DMAIC

In this two day workshop you will learn to use the five methodology phases of DMAIC to eliminate defects in a continuous improvement initiative. You will learn and practice problem solving skills and methods, understand variation and learn basic mistake proofing approaches and guidelines.

STATISTICAL PROCESS CONTROL (SPC)

This class will give you a basic understanding of the various Statistical Process Control (SPC) techniques, their applications, and the benefits of the different applications for lean manufacturing and quality assurance.



**The South Carolina Manufacturing Extension Partnership (SCMEP) is a private, non-profit company that serves as a proven resource to South Carolina small to mid-size businesses, providing them with a range of innovative strategies and solutions. An affiliate of the National Institute of Standards & Technology (NIST), SCMEP operates under the US Dept of Commerce and offers business and technology assessments, engineering expertise and lean manufacturing solutions.*

FOR MORE INFORMATION ON THESE OR OTHER QUALITY TOPICS, CONTACT:

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