



## **500 - Lean Education & Awareness for Managers**

**Onsite – 6 Days, 6 - 8 Hours/day – Optimum class size 8 -10 students**

**Modules #1 duration will be 6 hours, two trainers with office simulation.**

**Modules #2, #3, #4, #5 & #6 duration will be 6 - 8 hours with one instructor.**

**Instructor will be available after each class to answer questions.**

### **Training Description:**

Lean Education & Awareness for Managers consists of six modules to be delivered over a three month period in 6 - 8-hour sessions. The modules are designed to provide both awareness and education through classroom and actual “hands on” improvement exercises on the shop floor or in the office. The awareness in Module #1 begins with a simple office simulation that allows the trainees to discover that customers, both internal and external are only willing to pay for value added activities. Once the trainees understand what activities add value they then can find the waste that exists in every process. Then they can move on to be educated in the tools of Lean that are designed to eliminate the waste that is inherent to all systems.

The second day will be the beginning of a logical training progression. Managers will be coached to understand that Lean is a team-based activity that follows a process. Following this process is paramount to success. Modules #2 is dedicated to team development, identifying the characteristics of a good team and creating a vision for Lean implementation. The trainees will then be introduced to the Kaizen 10-step continuous improvement process in Module #3. Special attention will be placed on the PDCA (Plan-Do-Check-Act) cycle of continuous improvement.

Module #4 will concentrate on the basic tools of Lean. Trainees will be given an over view of Lean tools: 5S, Quick Changeover (SMED), Cell Flow and Pull Systems. Value Stream Mapping (VSM) will be covered in more depth since this tool is considered to be the entry way into the house of Lean and waste elimination. The follow-up session will introduce students to the 8-Step problem solving technique stressing the skills needed to fix problems in real time.

Module #5 will concentrate on Problem solving using the four-step Improvement Kata pattern as the platform for training that is scaled to be utilized as a working pattern or overlay for project-type assignments throughout organization. This will be delivered as classroom and “hands on” activities with emphasis on the Scientific Method of problem solving (PDCA).

Finally, Module #6 will conclude with a session on sustaining the gains. The topics will include developing measurements that work, Job instructions and standard work for leaders.

These skills are transferable within the company, industry and are highly desirable by any manufacturer.



## Training Agenda:

### Module #1 - Identifying Waste (with Simulation)

This module uses a variety of exercises – including a simulated office order entry process to demonstrate Lean concepts. Typically, Lean is thought of as a program for the factory and is not transferable to the office environment. The simulation involves the trainees and illustrates the quantifiable benefits that can be achieved when applying Lean in an office or administrative setting. The group will experience in the exercise what the customer, internal and external, perceives as value added. They will clearly see the wastes that exist in any clerical process and be taught the tools used to identify waste. They will be asked to eliminate, simplify and streamline the process to meet the demands of the customer.

#### Skill Attainment:

Employees will demonstrate the following skill attainment from this training:

- How to use a standardized model to layout the stream of value adding activities in a process while overlaying material flow, information flow, and non-value adding waste information to provide a qualitative picture of the actual process in our facility
- Ability to tie together lean concepts, techniques and a method to develop a working blueprint for implementing lean concepts on the shop floor
- How to apply a standard method for describing what is actually taking place now on the shop floor and what it should look like in the future state.

### Module #2 - Building a Lean Team

Working in teams is one of the cornerstones of continuous improvement and lean manufacturing implementation methodologies. It is therefore critical that the people who are members of teams in your organization work effectively and successfully together to accomplish their charters and goals. Research has revealed that successful teams have certain characteristics and utilize certain techniques and methods that enable them to be effective. This training course provides the knowledge of these characteristics, techniques, and methods; and also the know-how for you to be able to form and nurture successful work teams in your organization.

#### Skill Attainment:

Employees will learn how to develop a team by first Identifying and developing a shared common purpose, they will learn how to create shared operational values, how to establish acceptable team behaviors, how to conducting an effective team meeting, how to confronting and resolve conflict on the team, the will learn the importance of celebrating and rewarding accomplishments, and most importantly they will understand the critical role of Team leader/facilitator. The transferable skills learned will enable our employees to create the Mission Essential Task List (METL) to ensure the Quality and Productivity goals are measured on a daily basis.



### Module #3 - Kaizen, a 10-Step Process

Continuous improvement is best accomplished through the application of Kaizen, a Japanese process that follows the Deming Wheel — Plan-Do-Check-Act. Kaizen is a process where problems are quickly identified, analyzed and solved and the root causes are eliminated. This “just-do-it” philosophy utilizes “flow” and “pull” signals to link all parts of the system to the customer’s demand while optimizing the manufacturing process through continuous improvement. Having chosen an improvement opportunity, typically from a Value Stream Mapping exercise, an experienced facilitator will guide the team through developing the Kaizen Mandate and following the Plan-Do-Check-Act 10 step process. A Kaizen event is a hands-on, real-time activity – that means, equipment is moved, walls are taken down, and significant changes to the process are expected.

#### Skill Attainment:

Kaizen Rapid Improvement Workshops students will be taught the following:

- Classroom training on the 10 Step Kaizen Process
- Develop/Review Kaizen Mandate or Problem Statement
- Analyze and document the current situation
- Determine Target Measurements
- Brainstorm improvement ideas
- Implement solution(s)
- Test solution and record results
- Standardizing and sustaining plans will be developed to ensure long lasting results.

### Module #4 - Lean Tools Featuring VSM

A value stream map is a standardized model used to layout the stream of value adding activities in a preproduction process flow map from the office while overlaying paper flow, information flow, and non-value adding waste information to provide a qualitative picture of the actual process in a facility using the “swim lanes (Rumler-Brache)” mapping technique. This tool also maps the information flow from the customer, through the enterprise to suppliers and back to customers. It provides a common language for discussing any process. It provides a means to tie together lean concepts and techniques and a method to develop a working blueprint for implementing lean concepts on the shop floor. It is an excellent method for describing what is actually taking place now in the office and what a company wants it to look like in the future state. It takes an enterprise systematically from its current state of operations to a dramatically improved future state – a Lean Enterprise.

#### Skill Attainment:

Students will learn how to map the pre-production information flow and develop an implementation plan.

- How to map the Current State using “swim lanes (Rumler-Brache)”
- How to map the Future State
- Map the Current State of the pre-production process for the product(s) noted above
- Map the Future State of the pre-production process for the products noted above
- Super-impose the Kaizen activities required to make the transformation happen.
- Build a Kaizen Plan for implementation.



### **Module #5 - Problem Solving using Toyota Kata**

The KATA exercise combines a practical scientific pattern (the "Improvement Kata") with techniques of deliberate practice, to help make scientific thinking a teachable skill that anyone can learn. Teams of students (a) establish a baseline, (b) face a Challenge, (c) develop a next Target Condition on the way to achieving a goal and (d) conduct experiments towards meeting the Target Condition. While the students are engaged in a challenging game, they are simultaneously being introduced to a scientific method of problem solving.

#### **Skill Attainment:**

KATA teaches universal skills for documenting and achieving challenging goals. Participants will enhance their thinking skills including: problem solving, decision making, critical thinking, job task planning and organization. Students will learn:

- Scientific & Creative Thinking – A process to generate and refine solutions to obstacles through experimentation.
- Collaboration – How to work as a team to accomplish a next goal on the way to a larger challenge.
- Communication – How to organize thoughts, document data & findings, and share them effectively throughout the organization.

### **Module #6 - Standard Work & Sustaining the Gains**

Training Within Industries (TWI) training will provide instruction and skill building on achieving standard work, sustaining gains made by Lean, increase productivity, improve morale, and reduce training time. TWI consists of standardized programs that teach the essential skills needed by all supervisors and team leaders to create the culture to lead an organization through a Lean Transformation and the skills necessary to sustain the impacts. The first module teaches supervisors how to follow the systematic four-step methodology that makes it easy for them to learn to develop job instructions for training new employees and support standard work.

#### **Skill Attainment:**

Trainees will attain the following skills and learn to understand and deliver the 4-Step Method for proper Job Instruction including:

- Preparing a trainee to learn a particular task or job,
- Presenting the operation to the trainee,
- Observing the trainee doing the job correctly,
- Putting the trainee on their own and following up on results.

Skills will be used to properly prepare employees for training and then deliver an effective training plan to the organization.