



## Lean Six Sigma Yellow Belt Training Program

Onsite – 4 Days – Optimum Class Size: 6-10 Participants

### Training Description:

The Lean Six Sigma Yellow Belt Training Program combines the proven methods of Lean with the power of Six Sigma to allow you to solve difficult problems within your business. The curriculum is based on the approach pioneered by Motorola and utilized by successful companies of all sizes.

This training will introduce the participants to the structured data driven problem solving methodology known as DMAIC (Define, Measure, Analyze, Improve, Control). This methodology, in concert with the Lean business improvement strategy seeks to identify, reduce, and eliminate defects from products, processes, and business transactions.

Participants will learn critical thinking skills, how to reduce variation and non-value-added activities, gain leadership skills and focus on the voice of the customer, all while reducing defect rates, cost, and cycle time. Participants will utilize the DMAIC model and will learn statistical methods and software (Minitab) to analyze company data and make process improvements.

You do not need to be a statistician or math wizard to attend. Statistics are presented with the “keep it simple statistically” approach so participants can master the skills. A combination of presentation and hands-on exercises and simulations are used throughout to ensure a practical working knowledge of the methods. Participants who take this class, successfully complete an application project, and pass the Lean Six Sigma certification exam will be certified as a LSS Yellow Belt.

### Training Objective:

The objective of this training will be to have each participant complete at least one management approved project within their organization which will eliminate waste, improve cycle time and/or improve quality. Projects will address specific quality, productivity and process issues using a data driven approach to minimize or reduce process variation. Each student will be required to complete and document a Yellow Belt project illustrating the business and quality impact of their work for certification. Students will use a Statistical Software package in class (Minitab) to solve statistical analysis problems.

### Skill Attainment:

Six Sigma Yellow Belt Training - Participants will learn how to apply continuous improvement tools subjective and analytical tools. Continuous Improvement skills will be taught in the class, hands on exercises, and learning some statistics.

The following topics will be taught during this training:

- History of Lean and Six Sigma
- Basics of Six Sigma
- Organization of Lean Six Sigma
- Define
- Project Charter
- Gemba
- SIPOC
- Value Stream Mapping
- Voice Of Customer
- D.O.W.N.T.I.M.E.
- 6S
- Cost Of Poor Quality
- Introduction to Minitab
- Pareto Charts
- Project Management
- Six Sigma Metrics



- Measure
- Measurement Systems Analysis
- Basic Statistics
- Normality
- Process Mapping
- 5 Points of View
- Data Collection & Sampling
- Graphical Analysis
- Control Charts
- Capability Analysis
- Analyze
- Inferential Statistics
- 5 Whys
- Fishbone Diagram
- Cause & Effect Matrix
- Central Limit Theorem
- Improve
- Simple Linear Regression
- Kaizen
- Theory of Constraints
- Future State Mapping
- Principles of Lean
- Visual Management
- Plant Layout
- Standard Work
- Point Of Use Storage
- Batch Size Reduction
- Poka Yoke
- Setup Reduction
- Kanban
- 1-Piece Flow
- Cross Training
- Takt Time
- Total Productive Maintenance
- Control
- Failure Modes and Effect Analysis
- Overall Equipment Efficiency
- Statistical Process Control
- Control Plans
- Communication Plans
- Audits
- Response Plans

### **LSS Yellow Belt Training Overview and Expectations**

- 4 days of Interactive Classroom instruction with instructor lead support
- The sessions will be held over a month period and include Classroom Learning, Exercises, Activities, Demonstrations, On-the-Job practical Application, Homework.
- Within three months after the training initiation the participants are expected to complete at least one successful project approved by top management.
- Skill requirements
  - Basic Computer Skills – spreadsheets, word processing, email
  - Access to a computer/laptop both in and out of class
  - Access to Minitab software (company to provide)
- 100% attendance for all classes is required.

### **Expectations from Management**

- Will select and approve participant application projects
- Will allow time for project completion in between classes
- Will serve as champions and sponsors for their participants when they need support and resources
- Will attend ending project presentations at a minimum.

### **What the Students can Expect**

- Clear and intuitive classes focused on making Lean Six Sigma simple and fun
- Workshops and practical application sessions – work as a team on exercises
- Learn how to manage Lean Six Sigma projects to get results
- One-on-One help as needed in between classes
- Finish a project successfully with a clearly identified and verifiable financial impact
- Have fun!