

MANUFACTURING SYSTEMS

Lean Manufacturing – training and consulting in implementing the Lean techniques that will reduce inventory, lead time and defect levels. PQA has developed a 7-step process for training and implementing Lean:

- The Lean Training program has been designed to be provided in 2 phases.
- The first phase of the Lean Training program, Classroom Training, is built around the 7 Value Stream Management steps needed to plan, map, and sustain lean improvements. The seven steps are:
 - Step 1: Commit to Lean – this includes assigning a champion and team to a value stream, and defining the vision and goals for the team through a project charter prepared by the team and confirmed by management
 - Step 2: Choose the Value Stream – this involves targeting a product/product family (the value stream) to eliminate waste and improve overall material & information flow
 - Step 3: Map the Current State – the team will learn how to prepare a Current State Value Stream Map.
 - Step 4: Identify Lean Metrics – the easiest way to get people to contribute to Lean initiatives is to give them a simple means of understanding the impact of their efforts as they improve their value stream. Lean metrics provide such a means, thus helping to drive continuous improvement and waste elimination.
 - Step 5: Map the Future State – there are 3 stages for future-state mapping; customer demand, continuous flow, and leveling. In step 5 we introduce the teams to the bulk of the Lean tools & techniques. Topics include 5S, Takt Time, Buffer & Safety Inventory, JIT, Line Balancing, Kanban, Quick Changeovers (SMED), Total Productive Maintenance (TPM), Paced Withdrawal and Heijunka. These and other tools will give us the concepts needed to prepare a Future State Value Stream Map.
 - Step 6: Create Kaizen Plans – a kaizen plan is a call to action; the details of the actions, responsibilities and timelines to achieve the future state. A key element in this step is to create a Storyboard that communicates the lean journey; the storyboard is prepared in this step.
 - Step 7: Implement Kaizen Plans – Just Do It! And then document the improvements achieved in the lean metrics
- The second phase is Application Training, conducted at your facility, where the project team(s) will apply the 7-step Value Stream Management process that they have learned in the classroom sessions, under the guidance of the trainer.
 - There is typically between 10 to 15 days of Application Training