

**CREATING A LEAN ENTERPRISE**

**FRAMEWORK**

One way we deliver results is by using our proven Cascade Engineering Production System (CEPS). CEPS is rooted in our long-term vision, values and principles, intimate knowledge of the customer, disciplined approach and visually explicit processes. We achieve results by building quality into the process, employing "Just-in-time" techniques and relentlessly pursuing continuous improvement through the involvement of our people and partners. We strive to provide the right product, at the right time, and at the right place and cost.

**RESULTS**

- Inventory cut by 20-30%
- Product lead time decreased by 20%
- Defects decreased by 30% to 50%
- Productivity increased 10 to 12%
- Floor space reduced by 25% or more
- Generate 1200 or more continuous improvements per year
- Actively manage over 25 value streams

**CEPS**  
Quality Cost Delivery Safety Morale

**5S and Visual Workplace**  
Stable & Standardized Processes  
Voice of the Customer  
Vision, Values, and Principles

**APPROACH**

We are able to achieve such impressive results by utilizing existing, proven methods. By having processes in place to gather information from individual successes and failures, we can learn and improve from all levels within the company. Some of our strategies include Shingo Enterprise and Lean Assessments, Value Stream workshops, and Kaizen events. We actively seek employee input through a variety of "listening posts" to ensure that we leverage their ideas, and by using our continuous improvement Heijunka™ methodology, we ensure that improvements are sustained and ongoing.

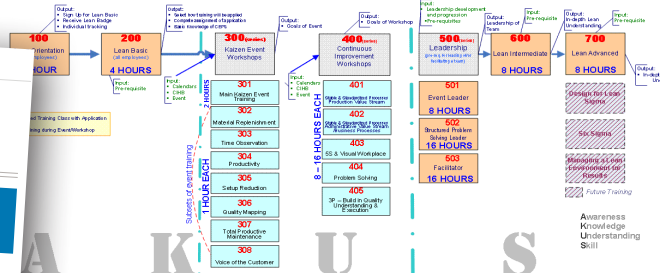
**QUALIFICATIONS**

- US Department of Commerce Manufacturing Council representation
- Shingo Board of Examiner representation
- Society of Manufacturing Engineering Lean Certification instructors
- Certified Project Management Professionals (PMP)

**Managing Lean Enterprise with CEPS**

Lean Improvement Cycle: Improvement Plan, Event Conduct, Improvement Metrics, Lean Improvement Sustained

**DEVELOPING LEAN ENTERPRISE UNDERSTANDING**



Assessment Score:	12%	12%	25%	12%	25%
Assmt Points Goal	70	74	0	0	0
% Improvement Goal over PREVIOUS Score	12%	12%	25%	12%	25%
# of Actions Identified	0	18	0	0	0
Assmt % Scored	60%	71%	73%	0%	0%
Assmt Points Scored	70	104	102	0	0
% Improvement Goal over PREVIOUS Score	12%	12%	25%	12%	25%
# of Actions Identified	0	46	0	0	0
Assmt % Scored	66%	62%	65%	0%	0%
Assmt Points Scored	79	87	91	0	0
% Improvement Goal over PREVIOUS Score	12%	12%	25%	12%	25%
# of Actions Identified	0	6	4	0	0
<b>COMPANY TOTALS</b>					
Assmt % Scored	13%	15%	16%	0%	0%
Assmt Points Scored	72	82	88	0	0
% Improvement Goal over PREVIOUS Score	12%	12%	25%	12%	25%
# of Actions Identified	0	99	4	0	0
% of Actions Completed	0%	58%	0%	0%	0%

**LEGEND:** ■ Met Goal ■ Improved but did not meet goal ■ Did not improve or meet goal

developed with:

**Lean Production System**

Patterned after Toyota's Production System Model, as well as the nationally recognized Shingo Award; we developed and launched a holistic business model to assess, improve and manage operational excellence.