

## 2009 SEA Criteria

### 1.0 Leadership & Culture

1.1.1 Strategic Planning Process – How does your organization accomplish its strategic planning? What are the key process steps and who are the participants? How do you ensure that the process addresses strengths, weaknesses, opportunities, and threats; major shifts in technology, markets, and competition? How are standards such as AS9100 integrated into the planning process? What are your key strategic goals and timetables?

1.1.2 Leadership Communication Process – How do senior leaders communicate and reinforce company direction and expectations (vision, goals, mission, and values) to all employees and key suppliers/partners? What are the key process steps and who are the participants? How do senior leaders encourage frank, two-way communication throughout the organization?

1.1.3 Organizational Performance Review Process - How do senior leaders review organizational performance to assess organizational success, competitive performance, and progress relative to strategic goals and action plans? How do you translate organizational performance review findings into priorities for continuous improvement?

1.1.4 Continuous Improvement Management Process – How does your organization select improvement priorities and review progress on improvement initiatives? How are process owners, master trainers, and strategic champions included in this process? What criteria are used to select priorities for improvement? How are improvement projects and teams selected and given direction? How is a standard problem-solving model deployed throughout the organization? How are recognition and sharing of mistakes and successes accomplished?

1.1.5 Workforce Development Integration Process – How does your organization select topics for workforce development for the company? How does the selection integrate with strategic goals and process improvement needs? How is the workforce-training plan prepared and monitored?

1.2.1 Goals Deployment & Review Process – How do senior leaders deploy strategic goals to work groups/departments and individual employees to achieve top-to-bottom alignment? What are the key action plans? What are the key performance measures or indicators for tracking progress? How does your organization review progress on work group/department and individual employee objectives? What frequency are reviews held and who are the key participants in each review?

1.2.2 Values Deployment Process – How do senior leaders use values to establish and reinforce the desired lean culture within the organization and its supply chain? What activities are used to deploy values? How frequently are these activities carried out and who are the key participants? How are employees, workgroups/department, and/or process improvement teams recognized or rewarded for results or effort?

1.2.3 Supply Chain Integration Process – How do senior leaders select supply chain improvement projects? How does your organization integrate its customers and suppliers into its improvement strategies? How do you certify outside suppliers in quality, delivery and ability to respond to pull signals? How do you integrate suppliers into your lean strategies such as in supplier managed inventory, min-max, consumption-based ordering, pull signals?

1.3.1 Organizational Learning Process – How does your organization ensure continuous learning from improvement projects, customers, and suppliers? How does your organization integrate benchmarking into the learning process? How does your organization integrate such learning into on-going employee education, training, and development?

1.3.2 Organizational Assessment Process – How does your organization systematically assess its process maturity and performance related to key operational, customer, supplier, employee, and financial goals?

## **2.0 Workforce Development**

2.1.1 Job Skills & Cross-Training Certification Process - How is job skills training and certification accomplished? How does your organization ensure that processes selected are linked to key priorities for improvement? How is cross-training accomplished? How is the team of master trainers maintained and expanded? How is the training and cross-training program reviewed?

2.2.1 Continuous Improvement Process – How is continuous improvement supported in all work areas? How are improvement projects linked to work area goals? How does the work area integrate continuous improvement into their daily operations? How are problem-solving and corrective action methods standardized in all workgroup processes? How is this process monitored and improved?

2.2.2 Statistical Methods Process – How are statistical methods integrated into the standard work for appropriate managed processes? Are there process control plans in place and implemented? How are statistical methods reviewed and their application improved?

2.3.1 Team Control Process – How are teams developed and encouraged to manage their own continuous improvement, problem solving, and performance? How is team control developed and improved?

## **3.0 Operational Excellence**

3.1.1 Kaizen Process – How does your organization set and review priorities for Kaizen events? How is recognition for team members provided and who is involved? How are lessons learned shared with others who can benefit? How are process improvements documented and deployed to others using the same or similar processes? How are internal Kaizen leaders developed and deployed? How are goals set for Kaizen leadership and how is progress monitored?

3.1.2 6S Visual Workplace Process – How does your organization ensure effective deployment of 6S Visual Workplace strategies for workplace organization? How are the process flow, production status, employee training status and continuous improvement effort clearly displayed and visible in the office and factory floor? How does your organization ensure that work areas are kept consistently free of dirt and clutter? How are improvements reviewed and recognized?

3.1.3 Quick Changeover/SMED Process – How does your organization continually reduce changeover and setup times? How are changeover and setup times tracked and displayed on the factory floor? Have machine operators been formally trained in SMED methods? How is progress reviewed and recognized? What metrics are monitored?

3.1.4 Material Management Process – How does your organization focus on improving its material management processes in support of your lean and flow manufacturing objectives? How does your organization maintain a high level of inventory accuracy? How do you maintain a high level of 6S in material storage areas? How are levels of obsolete, slow-moving and expedited material maintained at a minimum? How are material handlers, material planners and supervisors formally trained in material management methods?

3.1.5 Production Planning Process – How does your organization focus on improving its production planning processes in support of your lean and flow manufacturing objectives? How often are production requirements updated and communicated to the factory floor? How are production schedules communicated to different work centers? How are pull methods such as FIFO lanes and supermarkets used to replace the need for detailed production schedules? How are production planners trained in production planning methods?

3.2.1 Flow-Based Material Process – How does your organization integrate the requirements of a flow-based material process? How are “pull” methods such as material Kanbans, consumption-based ordering and min-max utilized? How are Kanban supermarkets integrated into factory floor operations? How are material handlers formally trained in lean material management methods?

3.2.2 Mixed Model Cell/Line Design Process - How does your organization integrate mixed model cell/line design into its operations throughout the enterprise? How are production and industrial engineers,

production managers and supervisors, and material management personnel trained in the lean mixed model line design methods? How are major processes linked and balanced into a continuous flow? How are pull methods such as In Process Kanbans, FIFO lanes and Kanban supermarkets integrated into the production flow? How are operators cross-trained for multiple workstations?

3.2.3 Lean Suggestion Process – How does your organization solicit and recognize suggestions for lean and continuous improvement? How are process improvement ideas solicited, reviewed, approved, and implemented? How is a high level of workforce participation ensured? How are improvement suggestions recognized? How are suggestions made visible in work areas?

3.2.4 Total Productive Maintenance Process – How does your organization integrate and deploy the principles of Total Productive Maintenance? How have you changed the role of machine operators in regard to machine setup, maintenance and simple trouble-shooting? How is a high level of 6S maintained in machine cleanliness, tooling organization and shop supplies? How is the TPM program tracked and monitored? How are operators, managers and supervisors trained in TPM?

3.3.1 Design of Experiments Process – How does your organization utilize the principles of Design of Experiments? How does your organization create Subject Matter Experts in DOE and how does it ensure that DOE is integrated into the overall improvement effort?

3.3.2 Design to Cost Process – How does your organization utilize the principles of Design to Cost? How does your organization create Subject Matter Experts in DTC and how does it ensure that Design to Cost is integrated into the design process when applicable?

3.3.3 Six Sigma Projects Process – How does your organization utilize the principles of Six Sigma and how are these integrated into improvement efforts? How does your organization create Six Sigma Subject Matter Experts and how does it ensure that Six Sigma techniques are integrated into the overall improvement effort?

3.3.4 Six Sigma Design Process – How does your organization integrate Six Sigma Design processes into improvement efforts? How does your organization create Subject Matter Experts on Six Sigma Design and how does it integrate Six Sigma Design into the overall improvement effort?

3.3.5 Design for Manufacturability Process – How does your organization integrate Design for Manufacturability into your improvement efforts? How does your organization create Subject Matter Experts and ensure that DFM techniques are utilized in the design process?

## **4.0 Business Results**

4.1.1 Inventory Turns – What is your organization’s monthly history in inventory turns?

4.1.2 Sales/Employee – What is your organization’s monthly history in sales per employee?

4.1.3 On-Time Delivery – What is your organization’s monthly history in on-time delivery?

4.1.4 Parts per Million – What is the organization’s monthly history in parts per million defects?  
(organizations using Defects per Million Opportunities may present this instead)

4.1.5 Process Maturity 3 and above – What is the organization’s quarterly history in processes achieving Level 3 process maturity or above?

4.2.1 Defects per Million Opportunities – What is the organization’s monthly history in defects per million opportunities?

4.3.1 Rolled Yield – What is your organization’s monthly history in rolled yield?

4.3.2 Cpk - What is your organization’s monthly history in Cpk?

Note - Reference the current quarterly report format and definitions for these metrics -  
<http://www.seaonline.org/docs/SEAQuarterlyReport.doc>

### **Evaluation Criteria for Processes**

Each process in the Roadmap will be evaluated as to its maturity using the following questions. The number at the beginning of each question corresponds to the maturity level. To pass Certification, all processes for the Stage being audited (Stage 1, 2, and/or 3) must be at Process Maturity Level 3.

0. The process does not meet any of these requirements
1. The process addresses most of the requirements above and has a process owner
2. The process has been documented to the work instruction level
3. The process is standardized and has certified trainers
4. The process is under control and is measured and analyzed using data
5. The process shows positive trends of improvement over time and compares favorably with world class benchmarks

### **Evaluation Criteria for Business Results**

Each Business Result in the Roadmap will be evaluated on its improvement level using the following scale. The most recent 15 months of data for each result must be reported. Twelve months will be evaluated against the average in the baseline (oldest 3 months.) To pass Certification, all Business Results for the Stage being audited (Stage 1, 2, and/or 3) must be at or above 3.

- 0 = No results reported
- 1 = No results in last 12 months better than baseline (prior quarter average)
- 2 = Some results (<49%) in last 12 months better than baseline
- 3 = Most results (> 50%) in last 12 months better than baseline
- 4 = All results in last 12 months better than baseline