AME Manufacturing Excellence Award

2014 Application Guidelines and Evaluation Criteria

The AME Manufacturing Excellence Award recognizes North American manufacturing plants that have demonstrated excellence in manufacturing and business operations. The primary focus of the award is to acknowledge continuous improvement, best practices, creativity, and innovation. This award supports AME's mission of inspiring commitment to enterprise excellence through shared learning and access to best practices.

The Application requirement for 2014 is for a single plant, including "maintenance, repair, and overhaul" operations in either the public or private sector.

The following Evaluation Criteria details a Lean systems model for manufacturing excellence. In writing the Achievement Report, endeavor to respond to each section of the criteria as requested. It is preferable to organize each section around a few headings rather than respond bullet-by-bullet. The Achievement Report should focus on accomplishments over the last three to five years. The primary purpose of the report is to explain the process strategy used at your plant to achieve a culture of manufacturing and business excellence leading to increased global competitiveness. **Your Achievement Report must be received at the AME office by Friday, March 14, 2014.**

Please note that appropriate sections should address both the "front office" and "manufacturing" efforts and processes to achieve business excellence at your plant. Failure to fully address the issues requested in each section will lead to a lower overall score and decrease the likelihood of a plant assessment site visit. Use of headings and subheadings similar to the criteria outline is recommended for organizational clarity.

The Achievement Report should begin with the Intent to Apply form and the 2- to 3-page Plant Profile as detailed in the Intent to Apply form. The purpose of the Plant Profile is to provide the AME assessors a brief overview of the application entity.

I. Policy Deployment Process – 300 points total

A policy deployment system details the "management system" strategy and "human and organizational development" system of a plant or organization as a means to achieve desired business results in terms of safety, morale, quality, cost, and delivery.

Management System – 150 points

Issues to be addressed include (but are not limited to) the following:

- Describe your plant's policy deployment process (such as Hoshin Kanri Planning, Strategic Planning, etc.).
- Describe your management approach to achieve the defined policy goals and strategies.
- What is the scope and level of the plant's cascading policy goals, strategies, and action plans for both the "shop floor" and the "front office"?
- Describe your plant's continuous improvement program to achieve the Policy Deployment plan.
- Outline the role and relationship of management and all associates in achieving the company's goals and objectives.
- Explain how you utilize Standard Work in your management approach.
- Describe your system of outlining expectations and follow-up with all plant and site personnel.

Human and Organizational Development –150 points

Issues to be addressed include (but are not limited to) the following:

- Describe your plant's approach to training and employee and organizational development.
- List the efforts toward associate/employee engagement that have been or are being used to achieve a high level of employee morale, including suggestion systems, turnover, critical thinking skills, etc.
- Describe your plant's problem-solving process, including the role of teams within it.
- What is your plant's approach to recognition and reward for individuals or teams contributing to improvement?
- What is the role of "manufacturing associates" and "front office personnel" in achieving Kaizen or continuous improvement?
- Report three-to-five-year evidence of achieving high employee morale, including a clear description of how you measure employee morale. Results are requested in the form of a multi-year table.

II. Safety and Environmental Health – 50 points total

A safety and environmental health focus is key to successful business. Respond to the following issues aimed at ensuring safety in the workplace and the efforts aimed at achieving a carbon-neutral impact on the environment.

- Describe your safety program, including efforts to ensure ergonomic safety.
- Describe your system of outlining expectations and follow-up with all plant and site personnel.
- How are you improving your safety program?
- What is your impact on the environment?

Required Results for this section:

- Report your safety record for the past three to five years.
- Report your energy efficiency record for the past three to five years.
- Results are requested in the form of a table.

III. Manufacturing and Business Operations – 300 points total

The focus and efforts to achieve excellence in "manufacturing" and "front office" processes are key to business success. This section should address how techniques and principles have been used to achieve a continuous improvement system and culture. The goal is to eliminate all non-value-added processes, which requires attention to the three M's: waste (Muda), unevenness, fluctuation, and variation (Mura), and overburdening people or equipment (Muri). The three M's should be viewed as fitting together as a whole system.

This section is not designed to see how many improvement techniques have been utilized, but to learn how you have used the appropriate techniques and processes to achieve "manufacturing" and "front office" business excellence. It is important that the Achievement Report outline the role and relationship of all three M's. Examples of your accomplishments and results can be presented to document improvement (such as quick changeover reduction, etc.).

Manufacturing Operations – 200 points

Waste (Muda) – Describe all efforts to identify and eliminate all forms of waste on the "shop floor."

The generally recognized forms of waste are:

- Overproduction
- Waiting
- Transportation Time
- Excess Process Time
- Excess Inventory
- Excess Motion
- Defects
- Unused Employee Creativity

Unevenness, Fluctuation, and Variation (Mura) – Describe all efforts to identify and eliminate all forms of unevenness, fluctuation, and variation on the "shop floor."

The Lean techniques, tools, and principles that are generally accepted to eliminate unevenness and variation include, but are not limited to:

- Standard Work
- Jidoka or Stop the Line
- Poka-Yoke or Mistake/Error Proofing
- Heijunka or Level Loading Work
- Kanban or Managing Work in Process
- Yoketan or Sharing Information Sideways
- Preventative or Total Productive Maintenance
- Value Stream Mapping
- Other Techniques, Tools, or Principles

Overburdening People or Machines (Muri) – Describe all efforts to identify and eliminate all forms of overburdening people and machines on the "shop floor." Muri is often the result of Muda and/or Mura practices.

The Lean techniques, tools, and principles that are generally accepted to eliminate overburdening people and machines include, but are not limited to:

- 5S Standards and Discipline
- Cellular Layout
- One-Piece Flow
- Point-of-Use Tools
- Quick Changeover
- Visual Systems
- Right-Sized Equipment
- Ergonomic Equipment and Processes
- Part and Material Presentation
- Other Techniques, Tools, or Principles

5S and Heijunka, among other techniques, can be viewed as being focused on both the Unevenness and Overburden categories.

Business Operations – 100 points

It has been demonstrated by many organizations that the manufacturing techniques, tools, and principles can be operationally applied to transactional or "front office" activities. The same processes are listed to guide the writing of the Achievement Report section for Business Operations.

Waste (Muda) – Describe all efforts to identify and eliminate all forms of waste in the "front office."

The generally recognized forms of waste are:

- Overproduction
- Waiting
- Transportation Time
- Excess Process Time
- Excess Inventory
- Excess Motion
- Defects
- Unused Employee Creativity

Unevenness, Fluctuation, and Variation (Mura) – Describe all efforts to identify and eliminate all forms of unevenness, fluctuation, and variation in the "front office."

The Lean techniques, tools, and principles that are generally accepted to eliminate unevenness, fluctuation, and variation include, but are not limited to:

- Standard Work
- Jidoka or Stop the Line
- Poka-Yoke or Mistake/Error Proofing
- Heijunka or Level Loading Work
- Kanban or Managing Work in Process
- Yoketan or Sharing Information Sideways
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5S and Heijunka, among other techniques, can be viewed as being focused on both the Unevenness and Overburden categories.

IV. Extended Value Stream Management – 150 points total

Product development and supplier management are key to achieving high-level business results to meet customer expectations. In many cases, product development and supplier management for a multi-plant corporation are not located at the plant. However, product development and supplier management techniques, tools, and principles still are necessary for manufacturing success. If your plant is not directly responsible for Product Development and Supplier Management, you will need to solicit expected documentation and information from the appropriate corporate offices and describe your processes appropriately. If the plant is part of a multi-plant corporation, include information from that perspective if it impacts your extended value stream.

Product development and supplier costs significantly impact the total cost of a product. This section should describe the processes of product development and supplier management by the plant applying for the AME award.

Please include appropriate data or results where possible to document the trend and level of improvement.

Product Development – 75 points

Issues to be addressed include (but are not limited to) the following:

- What innovative processes are followed to meet customer expectations?
- How do you foster an understanding of customer expectations within your total workforce?
- What innovative processes are followed to reduce cost and increase value to the customer?
- What do you do in your new product development process to minimize total cost?
- What is your approach to benchmarking?
- How do you focus on variety reduction, commonality, and modularity?

Supplier Development & Procurement – 75 points

Issues to be addressed include (but are not limited to) the following:

- How do you partner with your suppliers to minimize total cost to your value stream?
- What is your focus regarding supplier certification?
- What is your supplier focus for continuous improvement to improve business results?
- What are your processes to achieve perfection in product and supplier management?
- What innovative processes are being used to improve market service and logistics?

V. Plant Results – 200 points total

All the issues and questions in Sections I to IV are designed to improve the means to the desired ends (plant results). This section focuses on quality, cost, delivery, and profitability. Plant business results should outline three to five years of results detailing the trend toward improvement, including an explanation of significant change in the trend. You are encouraged to include evidence of the "level of achievement" of your plant compared to your industry or other plants within your corporation. Results can be based on the plant as a profit center or a budget center. Within the four key metrics, two specific result measures (or theoretically similar measures) are required. ***Failure to provide the Plant Results requested will result in a lower section score, reducing your plant's chances of receiving a plant assessment site visit.***

In this section, report the plant's results for a minimum of three years for each of the following:

Quality – 50 points

The aim is to provide the customer with zero defective products. The following standard measures are to be reported:

- Scrap and/or yield rates (planned versus unplanned)
- Customer rejects annually (ppm) or appropriate industry measurement
- Other appropriate quality-related measures that would support the achievement of your Policy Deployment Plan
- Warranty claims

Cost – 50 points

The aim is to reduce cost and improve plant productivity. The two following standard measures are to be reported (with other measurements included if desired):

- Value added per associate or employee (sales minus purchased materials divided by total headcount)
- Inventory Turns -- raw, work-in-process, and finished as appropriate
- Other appropriate cost-related measures that would support the achievement of your Policy Deployment Plan

Delivery – 50 points

The aim is to provide the customer the product on time and in the quantity desired. The following two standard measures are to be reported (with other measurements included if desired):

- Percent On-Time and Complete Shipments
- Premium Freight Costs, including incoming raw material or finished goods shipment (Premium Freight is abnormal freight to meet customer demand)
- Other appropriate delivery-related measures that would support the achievement of your Policy Deployment Plan

Profitability – 50 points

The aim is to detail financial achievement to insure the ongoing operation of the plant. The following two standard measures are to be reported (with other measurements included if desired):

- Earnings Before Interest and Taxes (EBIT) profitability or other appropriate measure to document Plant profitability
- Operating income on manufacturing assets ratio
- Other appropriate profitability-related measures that would support the achievement of your Policy Deployment Plan

ELIGIBILITY for Applying for the AME Excellence Award

The Application entity is a single plant in the United States, Canada, or Mexico. Applicants doing "maintenance, repair, and overhaul" in either the private or public sector are eligible. The plant should have been in operation for a minimum of three years. Award eligibility must be delineated as "manufacturing" by the North American Industry Classification System (NAICS) - (see http://www.census.gov/eos/www/naics/). Questions regarding eligibility should be forwarded to the AME office.

Final decisions regarding AME Manufacturing Excellence Award recipients are made by the AME Awards Council.

CONFIDENTIALITY & NON-DISCLOSURE

All members of the AME Awards Council and all AME Assessors have signed confidentiality and non-disclosure agreements. The AME Manufacturing Excellence Award also has a clear policy and process to ensure that conflicts of interest are avoided.

TIMELINE FOR THE AWARD

- **Intent to Apply and Profile are due January 31, 2014**
- **Achievement Report is due March 14, 2014**
- **Plant Assessment site visits will be done in late May, June, and July 2014**
- **Plants will be notified of final results on August 15, 2014 (approximately)**
- **Award Ceremony will be during the annual conference in Jacksonville, Florida, November 10-14, 2014**

The application fee follows the United States Government definition for a small and large business.

- **Small Business – less than 500 employees in the total company is $2,000.**
- **Large Business – more than 500 employees in a company or corporate entity is $4,000, even though the plant may have less than 500 employees.**

The fee must be submitted prior to, or along with, the written Achievement Report, which is due March 14, 2014. Applications received without the application fee will not be considered.

PLANT ASSESSMENT FEE

The plant assessment site visit fee will vary depending upon the size and scope of the plant. For a small plant assessment site visit, the team will generally consist of three assessors. Medium-sized plants will require a team of four to five. Large plants will require a team of six to seven assessors. **This fee will generally run between $4,500 and $9,000**. Applicants will be notified of the fee prior to the plant assessment site visit. Fees for site visits cover the travel costs for assessors, as well as, the award ceremony and other directly related costs for the awards program.

APPLICATION REPORT AND PROCESS

The Achievement Report format should meet the following requirements:

- 8 ½ X 11 paper
- 10-pitch font
- English is the official language
- Double-sided printing
- Single spaced
- Maximum of 50 pages
- Lightweight binding, wired binding preferred
- Ten printed copies and one CD or USB flash drive
- Graphs, tables, photos (in black and white or color) to support the written material are welcomed. Tables and graphs should be simple, clearly legible, and labeled.

Send the ten printed copies of the Achievement Report and one CD or USB flash drive to:

Susan Chandler
Association for Manufacturing Excellence
3701 Algonquin Road, Suite 225
Rolling Meadows, IL 60008

Questions can be directed to Susan at schandler@ame.org or 224-232-5980, Ext. 222.

Applicants will be notified of the final results of their submission by August 2014.

AME
MANUFACTURING
EXCELLENCE AWARD