# AME MANUFACTURING EXCELLENCE AWARD

**Application Guidelines and Evaluation Criteria** 



The AME Manufacturing Excellence Award recognizes North American manufacturing plants (or sites) that have demonstrated excellence in their 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 award criteria are divided into six sections. Scoring is based on a total of 300 points.

The following Evaluation Criteria details a Lean systems model for manufacturing excellence. In writing the Achievement Report, strive 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 Achievement Report is to explain the process strategy utilized at your location to achieve a culture of manufacturing and business excellence in order to become more globally competitive. Your Achievement Report must be postmarked or received at the AME office by May 2, 2011.

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

**Plant Profile** – The Achievement Report should begin with a two-page summary document. Your profile should summarize information about your plant/location/site under the following Headings: Product Manufactured; People (the number of employees, exempt and non-exempt, etc.); Plant Info (including the years in operation, square footage, etc.); Corporation (brief description); and the Plant Contact. The purpose of the Plant Profile is to provide the AME Assessors a brief overview of the application entity.



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

Respond to the following issues aimed at achieving plant and company excellence:

#### **Management System**

- Describe your plant's Policy Deployment process, e.g., Hoshin 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 (e.g. Pareto Analysis, 5 Whys, etc.) 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/site personnel.

# **Human and Organizational Development**

- Describe your plant's approach to training, employee and organizational development.
- List the efforts toward associate/employee engagement that have been used 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?

#### Please report the result below in the form of a table, along with any written comments.

• Report your three-to-five-year evidence of achieving high employee morale, including a clear description of how you measure employee morale.

Points for this Section: 60 Points

**II. Safety and Environmental Health** – A safety and environmental health focus is key to successful business today. 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/site personnel.
- How are you improving your safety program?
- What is your impact on the environment?

# Please report the results below in the form of a table, along with any written comments.

- Report your safety record for the past three to five years.
- Report your energy efficiency record for the past three to five years.

Points for this Section: 30 Points

**III. Manufacturing and Business Operations** – 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 utilized to achieve a continuous improvement system and culture. The goal is to eliminate all non-value added processes. To eliminate non-value added processes, there are three categories or processes that require attention. The three Ms are Muda (waste), Mura (unevenness or variation), and Muri (overburdening people or equipment). The three Ms 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 utilized the appropriate techniques and processes to achieve "manufacturing" and "front office" business excellence. It is important that the Achievement Report outlines the role of all three bullet items and how each relates to the other two. Examples of your accomplishments/results can be presented to document improvement (e.g. quick changeover reduction, etc.).

**Muda or Waste** – Describe all efforts to identify and eliminate all forms of waste on the "shop floor" and the "front office."

#### The generally accepted forms of waste are:

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

**Mura or Unevenness/Variation** – Describe all efforts to identify and eliminate all forms of unevenness/variation on the "shop floor" and in the "front office."

The Lean techniques and principles that are generally accepted to eliminate unevenness/variation are, 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 or Principles

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

The Lean techniques and principles that are generally accepted to eliminate overburdening people and machines are, 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 or Principles

Points for this Section: 100 Points

**IV. Extended Value Stream Management** – 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 are not located at the plant for a multi-plant corporation. Nevertheless, product development and supplier management techniques and principles are necessary for manufacturing success. Therefore, if your Plant is not responsible for Product Development and Supplier Management, you will need to solicit expected information from the appropriate Corporate Office.

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 this award. If the plant is part of a multi-plant corporation, include information from that perspective if it impacts your extended value stream. Please include appropriate data or results where possible to document a trend and level of improvement.

#### Among the issues to be addressed are:

- 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?
- How do you partner with your suppliers to minimize total cost to your value stream?
- What is your focus toward 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?

Points for this Section: 40 Points

**V. Plant Results** – All of the above issues and questions are designed to improve the means to the desired ends (e.g. 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. Any evidence of the "level of achievement" compared to your industry or other plants within your corporation are encouraged. 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 to determine whether your Plant will receive a Plant Assessment Visit.

In this section, report the plant's results for the past three to five years in each of the following:

**Quality** – The aim is to provide the customer zero defective products. There are two standard measures 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

**Cost** – The aim is to reduce cost and improve productivity of the Plant. There are two standard measures to be reported:

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

**Delivery** – The aim is to provide the customer the product on-time and in the quantity desired. There are two standard measures to be reported:

- 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** – The aim is to detail financial achievement to insure the ongoing operation of the Plant. There are two standard measures to be reported:

- 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

Points for this Section: 50 Points

**Section VI: Plant's Achievements** – In keeping with the AME Mission, "to inspire commitment to enterprise excellence through shared learning and access to best practices," please respond to the following statements that support the AME Mission:

- Summarize your plant's key achievements/best practices.
- Describe the two or three key achievements/best practices that you view as notable in your industry and/or manufacturing processes.
- Describe what other companies might learn from your key achievements/best practices.

Points for this Section: 20 Points

## **ELIGIBILITY**

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

Plants (or sites) selected to receive a Plant Assessment Visit will be notified two to three weeks prior to the visit. The purpose of the visit is to verify and clarify the Achievement Report. A visit will generally last 1½ to 2 days.

#### **APPLICATION and PLANT ASSESSMENT VISIT FEES**

The application fee for Plants (or sites) with 500 or more employees is \$2,000, and the fee for all Plants with fewer than 500 employees is \$1,000. The fee must be submitted prior to, or along with, the written application. Applications received without the fee will not be considered.

The plant assessment visit fee will vary depending upon the number of people and square footage of the plant (or site). Generally, a plant assessment visit team will consist of three assessors. Larger plants will likely require a team of four to seven assessors. This fee will generally run between \$4,000 and \$7,000. Applicants will be notified of the fee prior to the assessment visit.

## **APPLICATION PROCESS**

**Achievement Report** – The Achievement Report can range from 25 to 50 single space pages on 8 1/2 x 11 inch paper. Graphs, tables, photos in black and white or color, etc., to support the written material, are welcomed. The Achievement Report should be printed on both sides of the paper using a font size of at least 10 points. Tables and graphs should be clearly legible and labeled. The Achievement Report should be bound with a non-bulky, lightweight binding.

Please send 8 copies of the Achievement Report on a CD or USB flash drive to: Susan Chandler, AME, 3701 Algonquin Road, Suite 225, Rolling Meadows, IL 60008. Questions can also be directed to Susan at schandler@ame.org or 224-232-5980, Ext. 221. Your submission must be postmarked or received at the office by Monday, May 2, 2011. Applicants will be notified of the results of their submission by Monday, August 1, 2011.

Following a review of your Achievement Report by a team of Lean and Operational Excellence manufacturing practitioners, we may also request a visit to your plant or site to verify and clarify the information included in the Achievement Report. Please remember to provide the following contact information with your submission:

- Company name
- Address
- Size of the Plant in terms of number of people, square footage, number of buildings, years in operation, etc.
- Number of people at your location (exempt and non-exempt)
- Brief description of the business (what you manufacture)
- Name of main contact for purposes of this application (and address if different from main plant or site address)
- Title of main contact
- E-mail address of main contact
- Direct phone number of main contact
- · Mobile phone number of main contact

Thank you for applying.

