Australian Government

Department of Education, Employment and Workplace Relations

# MSACMS200A Apply competitive manufacturing practices

**Revision Number: 1**

# MSACMS200A Apply competitive manufacturing practices

## Modification History

Not applicable.

## Unit Descriptor

| | |
|---|---|
| **Unit descriptor** | This unit covers the skills needed to implement basic improvement practices within a competitive manufacturing organisation. The unit focuses on bringing together the basic concepts and the holistic application of these basic concepts and processes to manufacturing. It would typically be carried out working as part of a team. |

## Application of the Unit

| | |
|---|---|
| **Application of the unit** | In a typical scenario, an organisation has embarked on the competitive manufacturing path. This requires certain critical skills and principles to be practised in order for competitive manufacturing to succeed. These skills are to be used within the scope of the individual's job and authority.<br><br>This unit requires the application of skills associated with planning and organising own role within a competitive manufacturing framework. Initiative and enterprise and problem solving is also required to identify the contributions of self and others in the value chain and identify opportunities for improvement. |

## Licensing/Regulatory Information

Not applicable.

# Pre-Requisites

| | |
|---|---|
| **Prerequisite units** | |

# Employability Skills Information

| | |
|---|---|
| **Employability skills** | This unit contains employability skills. |

# Elements and Performance Criteria Pre-Content

| | |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the performance needed to demonstrate achievement of the Element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |

# Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Focus on the basic competitive manufacturing concepts | 1.1. Identify ***customers*** and their needs/requirements<br>1.2. Identify ***suppliers***<br>1.3. Identify value contributions along the chain<br>1.4. Identify and recommend methods of increasing own contribution to the value chain |
| 2. Improve the product/process value | 2.1. Identify customer features/benefits in the product<br>2.2. Identify items which contribute to those features/benefits<br>2.3. Identify things which do not contribute to customer benefits/features<br>2.4. Recommend methods of increasing features/benefits |
| 3. Use competitive manufacturing tools | 3.1. Select appropriate tools for the job/process<br>3.2. Apply the tool to the job/process<br>3.3. Monitor the job/process and make adjustments to improve it in accordance with ***procedures***<br>3.4. Identify own skill requirements and seek skill development if required |

# Required Skills and Knowledge

| REQUIRED SKILLS AND KNOWLEDGE |
| --- |
| This section describes the skills and knowledge required for this unit. |
| **Required skills** |
| • analysis<br>• communication<br>• planning<br>• teamwork<br>• problem solving |
| **Required knowledge** |
| • the customers and the benefits they derive from the products<br>• the suppliers and their capabilities<br>• product waste<br>• relevant tools for their job and how to apply them<br>• factors impacting on the product, process and waste, particularly those wholly or partially under their control (and how to control them) |

# Evidence Guide

| **EVIDENCE GUIDE**<br><br>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the assessment guidelines for this training package. | |
|---|---|
| **Overview of assessment requirements** | The person will work effectively in a competitive manufacturing environment, making continual positive contributions to the improvement of the business within the scope of their job. |
| **What are the specific resource requirements for this unit**? | Access is required to an organisation implementing competitive manufacturing. |
| **What critical aspects of evidence are required to demonstrate competency in this unit**? | There should be evidence of the individual's contribution to the value chain and willing application of competitive manufacturing to their job. |
| **In what context should assessment occur**? | Assessment should occur in an organisation implementing competitive manufacturing. |
| **Are there any other units which could or should be assessed with this unit or which relate directly to this unit**? | This unit is related to all other units at this level in that it is the general implementation of competitive manufacturing. It could be assessed concurrently with any unit dealing with the *tools* of competitive manufacturing.<br><br>This unit is related to:<br><br>• *MSACMS400A Implement a competitive manufacturing system* which covers the intermediate skill levels in CM. |
| **What method of assessment should apply**? | Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria, skills and knowledge. A holistic approach should be taken to the assessment.<br><br>Assessors should gather sufficient, fair, valid, reliable, authentic and current evidence from a range of sources. Sources of evidence may include direct observation, reports from supervisors, peers and colleagues, project work, samples, organisation records and questioning. Assessment should not require language, literacy or numeracy skills beyond those required for the unit.<br><br>The assessee will have access to all techniques, procedures, information, resources and aids which would normally be available in the workplace. |

| **EVIDENCE GUIDE** | |
|---|---|
| | The method of assessment should be discussed and agreed with the assessee prior to the commencement of the assessment. |
| **What evidence is required for demonstration of consistent performance**? | This should be a routine part of the operator's job and there should be evidence that these skills are practised routinely. |

# Range Statement

| **RANGE STATEMENT**<br><br>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included. | |
|---|---|
| **Competitive manufacturing** | Competitive manufacturing is used to describe the range of systemic manufacturing practice concepts and approaches. It covers but is not limited to:<br>• lean manufacturing<br>• agile manufacturing<br>• preventative and predictive maintenance approaches<br>• monitoring and data gathering systems such as Systems Control and Data Acquisition (SCADA)software, Enterprise Resource Planning (ERP)systems, Manufacturing Resource Planning (MRP), and proprietary systems such as SAP<br>• statistical process control systems including six sigma and three sigma<br>• Just In Time (JIT), kanban and other pull related manufacturing control systems<br>• supply, value, and demand chain monitoring and analysis<br>• other continuous improvement systems.<br>Competitive manufacturing should be interpreted so as to take into account the stage of implementation of competitive manufacturing approaches, the size of the enterprise, the work organisation, culture, regulatory environment and manufacturing sector. |
| **Customer** | Customer may be interpreted to be an internal customer, but typically the benefits to the final customer should be used as the basis for the identification of waste. The operator does not need to interface directly with the external customer, but should be provided with sufficient information to enable them to identify customer benefits and features.<br>Supplier may be interpreted to be an internal supplier, but typically the external supplier and their abilities should be known. The operator does not need to interface directly with the external supplier, but should |

| RANGE STATEMENT | |
|---|---|
| | be provided with sufficient information to enable them to identify supplier abilities. |
| **Tools** | Tools are used in this unit to mean the tools of competitive manufacturing such as 5S, 6 s , continuous improvement, cause effect diagrams |
| **Procedures** | Procedures include all work instructions, standard operating procedures, formulas/recipes, batch sheets, temporary instructions and similar instructions provided for the smooth running of the plant. They may be written, verbal, computer based or in some other form.<br>For the purposes of this Training Package, 'procedures' also includes good operating practice as may be defined by industry codes of practice (eg Good Manufacturing Practice (GMP), Responsible Care) and government regulations. |

# Unit Sector(s)

| | |
|---|---|
| **Unit Sector** | CM Systems |

# Co-requisite units

| | |
|---|---|
| **Co-requisite units** | |

# Functional area

| | |
|---|---|
| **Functional Area** | |