Australian Government

Department of Education, Employment and Workplace Relations

MSACMS604A Manage competitive manufacturing processes in a jobbing shop environment

Release: 1

MSACMS604A Manage competitive manufacturing processes in a jobbing shop environment

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the knowledge and skills required to prepare for, and manage the introduction of, a competitive manufacturing process in a jobbing/batching/contracting manufacturing environment.

Application of the Unit

Application of the unit	This unit applies to the introduction of competitive manufacturing processes in an environment where the enterprise specialises in one off or small batch product or process manufacturing or overhaul of equipment This unit describes the skills needed to restructure the process, work organisation to allow the application of competitive manufacturing principles. This unit requires the application of skills associated with problem solving, initiative, enterprise, planning and organising in order to manage competitive manufacturing processes in a jobbing shop environment. This unit also requires communication and teamwork skills to gather information about processes and implement redesign plans.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	*MSACMS601A*	*Analyse and map a value chain*
	MSACMT280A	*Undertake root cause analysis*
	MSACMT631A	*Undertake value analysis of product costs in terms of customer requirements*

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. Analyse the existing manufacturing process.	1.1. Identify enterprise capability for products and processes 1.2. Identify the major processing steps in meeting customer order or orders 1.3. Consult with employees, managers and other major stakeholders on major expected benefits from a move to a ***competitive manufacturing strategy*** 1.4. Identify lead times, throughput times and waiting times throughout process of meeting a customer order 1.5. Identify ***variations*** within the process 1.6. Identify causes of the variations
2. Draft a virtual flow process	2.1. Map flow of information, material, and people for each product family 2.2. Draw a current state value stream map for the process as a virtual flow process. 2.3. Analyse the current value stream map for ***waste*** 2.4. Draft possible future state value stream map(s) 2.5. Calculate benefits flowing from future State map(s) 2.6. Consult with stakeholders to validate these benefits
3. Prepare proposals for process redesign	3.1. Identify options for the delivery of changes required to move to future state value stream map(s) 3.2. Plan as to how these changes might be implemented including resource, industrial relations, workforce development and occupational health and safety considerations and implications 3.3. Cost the proposed changes and determine benefit cost ratios 3.4. Prepare recommendations for change 3.5. Negotiate/consult with relevant ***stakeholders*** to establish the preferred option.
4. Implement the plan.	4.1. Arrange for altered process layout as required 4.2. Arrange for altered ***infrastructure needs*** as required 4.3. Monitor the implementation of the plan, making adjustments as required 4.4. Review the new value stream and check that expected benefits have been obtained

ELEMENT	PERFORMANCE CRITERIA
	4.5. Put in place a continuous improvement mechanism for the new value stream.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
• analysis • problem solving • planning and organising • communication • documenting • calculations
Required knowledge
• processing requirements of products • capabilities of equipment • abilities and skills of personnel • business requirements from project

Evidence Guide

EVIDENCE GUIDE The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. it is essential for assessment and must be read in conjunction with the performance criteria, the range statement and the assessment guidelines of the relevant training package.	
Overview of assessment requirements	The person being assessed should be able to demonstrate competency in implementing and managing a competitive manufacturing approach in a jobbing shop environment.
What are the specific resource requirements for this unit?	Access to a jobbing shop implementing competitive manufacturing.
What critical aspects of evidence is required to demonstrate competency in this unit?	Evidence of the move to competitive manufacturing in a jobbing shop should be available
In what context should assessment occur?	Assessment will need to occur in a jobbing shop implementing/wishing to implement a competitive manufacturing strategy
Are there any other units which could or should be assessed with this unit or which relate directly to this unit?	This unit could be assessed concurrently with other relevant units.
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. 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. The assessee will have access to all techniques, procedures, information, resources and aids which would normally be available in the workplace. 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?	Generally assessment over a period of time would be needed to generate sufficient evidence. It is unlikely that a single assessment event would provide sufficient evidence and project and portfolio approaches are recommended

Range Statement

RANGE STATEMENT 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 strategy	Competitive manufacturing strategy may include one or more of: • Six sigma • Lean Manufacturing • Agile Manufacturing • Just in Time (JIT) • Supply chain management • Value Chain Management • Total Quality • Pro Active maintenance • Elimination of waste • Balanced Scorecard
Variations	Variations are deviations from desired targets and may cover variations in: • quality • time • cost • OHS
Waste	Waste (also known as muda in the Toyota Production System and its derivatives) is any activity which does not contribute to customer benefit or features in the product. Within manufacturing, categories of waste include: • excess production and early production • delays • movement and transport • poor process design • inventory • inefficient performance of a process • making defective items Waste for this unit may include activities which do not yield any benefit to the organisation or any benefit to the

RANGE STATEMENT	
	organisations customers.
Stakeholders	Stakeholders may include: • managers • supervisors • employees • shareholders • OHS mechanisms/representatives • IR mechanisms/representatives • suppliers • customers • service providers
Infrastructure needs	Infrastructure needs may include: • physical infrastructure, including plant, equipment, tools, systems and processes • information and control infrastructure • work organisation including numbers of employees • work structure and skills and knowledge held by employees • workforce development and, where required, training

Unit Sector(s)

Unit Sector	CM Systems

Co-requisite units

Co-requisite units	

Functional area

Functional Area	