



Australian Government

Department of Education, Employment and Workplace Relations

MSACMG702A Review manufacturing practice tools and techniques

Revision Number: 1

MSACMG702A Review manufacturing practice tools and techniques

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the application of continuous improvement to the use of competitive manufacturing tools and techniques; that is, facilitating the right use of the right tool at the right time and reviewing its application.
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Application of the Unit

Application of the unit	This unit is intended for team leaders and people with a similar sphere of influence and scope of authority and responsibility. It covers the reviewing of competitive tools used by an organisation which has already embarked on a competitive manufacturing path and is driven by the pull of its customers. The unit includes checking that the relevant competitive manufacturing practice tools are being consistently and correctly applied across the entire organisation to enhance customer and organisation value. It also includes reviewing the processes used to identify when additional or different competitive manufacturing tools should be applied. This unit applies to individuals who have a broad knowledge of all major competitive tools with in-depth application knowledge of several tools which are relevant to the organisation and familiarity with a define, measure, analyse, improve, control (DMAIC) approach. This unit may also be applied to service organisations applying competitive manufacturing principles.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Review the use of competitive manufacturing tools	1.1. Identify which competitive tools are being used in the work area 1.2. Define the outcomes expected from each tool 1.3. Observe and measure the actual outcomes being achieved 1.4. Identify gaps between actual outcomes and planned outcomes 1.5. Determine if the tools are being used as intended 1.6. Review tool use and determine if the most appropriate tool is being used 1.7. Audit health, safety and environment (HSE) impacts from the use of tools 1.8. Identify any system/process issues impeding the tools delivering their expected outcomes 1.9. Identify any gaps between tool capability and customer benefit requirements
2. Recommend changes to the use of competitive manufacturing tools	2.1. Define required further improvements identified 2.2. Prioritise required further improvements 2.3. Identify gaps inhibiting tool use 2.4. Recommend system and process changes as required to improve tool use 2.5. Recommend alternative or additional tools as required to achieve organisation requirements 2.6. Obtain required authorisations for changes
3. Facilitate the better use of competitive manufacturing tools	3.1. Facilitate training or other resources needed as required to improve tool use 3.2. Facilitate system and process changes as required to improve tool use 3.3. Facilitate the introduction and use of new tools as required 3.4. Initiate procedures for sustaining the changes

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- decision making
- communication at all levels
- situation analysis
- analysis

Required knowledge

- competitive manufacturing principles
- competitive manufacturing tools, their applications and limitations
- customer benefit
- ways of determining competency gaps
- DMAIC process applied to competitive manufacturing tool use
- approvals and delegations within the organisation
- procedures including processes for updating and drafting of procedures

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Demonstrates skills and knowledge required to:

- critically review the use of competitive tools.

In particular look for evidence of:

- taking a DMAIC approach
- comparing actual outcomes to planned outcomes
- discriminating between the causes of suboptimal performance
- recommending appropriate changes to tools used, tool usage and/or tool implementation.

Context of and specific resources for assessment

Assessment may occur on the job or in an appropriately simulated environment. Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.

Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.

Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.

Method of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Manufacturing Training Package.
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge.
- Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application.
- Assessment may be applied under project related conditions (real or simulated) and require evidence of

EVIDENCE GUIDE	
	process. • Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances. • Assessment may be in conjunction with assessment of other units of competency where required.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.

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.	
Review tool use	Review of tool use includes: identifying whether a better tool could have been used and whether there is an appropriate balance between daily continuous improvement and kaizen blitz
Codes of practice/standards	Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used
Health, safety and environment (HSE)	All changes implemented are expected to be at least neutral, or preferably beneficial, in their impact on health, safety and environment
Outcomes	Outcomes include: the benefits both to the organisation and also the customers
Define improvements	The definition of improvements may include: - a specification of the problem/capability gap being addressed - a specification of how that problem/gap will be solved/filled - a statement of the intended benefits of the solution - a statement of the indicators of progress and success
Organisation	Organisation includes: - any part of a manufacturing or service organisation - companies, government bodies or other body of people aiming to produce a product to service a customer
Competitive tools	Competitive tools are those techniques used to improve competitive manufacturing, typically

RANGE STATEMENT	
	described in the competitive manufacturing 'tools units' including: • 5S • Just in Time (JIT)/kanban • quick changeover • root cause analysis • maintenance including failure mode effects analysis (FMEA), and mean time between failure (MTBF)
Team leader	Team leader may include: • any person who may have either a permanent or an ad hoc role in facilitating the function of a team in a workplace
Gaps inhibiting tool use	Gaps inhibiting tool use may include: • competency gap of employees in own or other value chain enterprise • lack of management or employee support • lack of financial or other resources • inadequate data
Sustaining improvement	Improvement may be sustained by including it in: • standard procedures and work instructions • standard practice • other relevant documents and practices

Unit Sector(s)

Unit sector	CM Graduate
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		