Australian Government

Department of Education, Employment and Workplace Relations

# MSACMG807A Develop problem solving capability of a manufacturing organisation

**Revision Number: 1**

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

## MSACMG807A Develop problem solving capability of a manufacturing organisation

## Modification History

Not applicable.

## Unit Descriptor

| Unit descriptor | This unit covers the development of problem solving skills of individuals within an organisation and as a consequence the problem solving capability of the organisation as a whole. The unit does not supply the skills to undertake formal problem solving on individual problems. |
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## Application of the Unit

| Application of the unit | This unit is intended for organisation leaders/managers and people with a similar sphere of influence and scope of authority and responsibility. It applies where problem solving is already routine in the organisation and improving individual and organisational problem solving capability has been accepted as part of the organisation's improvement processes.<br>The unit applies to individuals who are already familiar with formal problem solving processes. Where this is not the case the following units may be completed to supply the necessary skills:<br><br>• MSACMT280A Undertake root cause analysis<br>• MSAPMSUP390A Use structured problem solving tools.<br><br>For high level complex problem solving skills refer to MSACMG712A Lead a problem solving process to determine and solve root cause.<br>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 | | |
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# 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 |
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| 1. Develop an appropriate organisational framework | 1.1. Determine problem solving approach/strategy to be used<br>1.2. Determine or review the desired outcomes from a problem solving program<br>1.3. Review organisational structure to facilitate improvement in problem solving<br>1.4. Analyse the selection and application of problem solving tools<br>1.5. Develop a training strategy to improve problem solving ability<br>1.6. Develop reporting framework and guidelines<br>1.7. Develop corrective action tracking systems<br>1.8. Obtain support from relevant process/system owners for proposed changes |
| 2. Improve problem solving ability | 2.1. Implement training strategy<br>2.2. Ensure problem solving occurs using groups or teams<br>2.3. Provide resources to ensure problem solving occurs<br>2.4. Ensure effective solutions are developed<br>2.5. Provide resources to ensure solutions are implemented<br>2.6. Ensure reporting and corrective action tracking occurs |
| 3. Review problem solving effectiveness | 3.1. Review corrective action tracking<br>3.2. Determine benefit/cost from solutions<br>3.3. Analyse interactions of multiple problems with each other and the organisation<br>3.4. Review problem solving strategy<br>3.5. Make improvements to problem solving strategy and approach |

# Required Skills and Knowledge

| **REQUIRED SKILLS AND KNOWLEDGE** |
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| This section describes the skills and knowledge required for this unit. |
| **Required skills** |
| • decision making<br>• communication at all levels<br>• negotiation<br>• problem solving<br>• situation analysis |
| **Required knowledge** |
| • competitive manufacturing principles<br>• problem solving methodologies<br>• workplace strategy and vision<br>• corrective action tracking methods |

# Evidence Guide

| EVIDENCE GUIDE | |
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| 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:<br><br>• improve the problem solving capability of the organisation.<br><br>In particular look for evidence of:<br><br>• ongoing review of systems and processes<br>• increasing problem solving capability. |
| **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.<br>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.<br>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.<br>• 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.<br>• Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application.<br>• Assessment may be applied under project related conditions (real or simulated) and require evidence of process.<br>• 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 |

| EVIDENCE GUIDE | |
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| | to other circumstances.<br>• 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 | |
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| 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. | |
| **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 |
| **Desired outcomes** | Desired outcomes from program include:<br>• improved customer service and delivery<br>• defect elimination<br>• capacity improvement<br>• cost reduction<br>• safety improvement<br>• improved complaint resolution |
| **Organisational structure** | Organisational structure may include:<br>• super-users and facilitators<br>• roles and responsibilities with regard to problem solving<br>• plans to broaden the users of problem solving approach<br>• plans to improve the problem solving performance of personnel |
| **Reporting** | Reporting should include:<br>• appropriate metrics (such as incident frequency, incident consequences)<br>• trigger criteria for conducting problem solving activity<br>• problem definition and quantification<br>• cause and effect chart (or similar)<br>• solutions identified |
| **Effective solutions** | Effective solutions will: |

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**RANGE STATEMENT**

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| | • prevent recurrence<br>• be within the control/ability of the organisation to implement<br>• meet organisation goals and objectives |
| **Competitive philosophy** | Competitive philosophy includes that body of knowledge and techniques which together guides an organisation towards achieving best practice in their processes and includes:<br><br>• manufacturing practice<br>• lean manufacturing<br>• agile manufacturing |
| **Required resources** | Required resources may include:<br><br>• plant<br>• materials (raw materials, components, work in progress, other consumables)<br>• energy (heating, cooling, fuel)<br>• appropriately skilled people as employees and in the value chain<br>• finances<br>• feedback/visual factory resources<br>• measuring equipment |
| **Manager** | Manager may include:<br><br>• any person who may have either a permanent or an ad hoc role in facilitating the function of multiple teams in a workplace, departments or entire organisations |

# Unit Sector(s)

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| **Unit sector** | CM Graduate |

# Competency field

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| **Competency field** | |

# Co-requisite units

| Co-requisite units | | |
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