



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MEM30013A Assist in the preparation of a basic workplace layout**

**Release: 1**

## MEM30013A Assist in the preparation of a basic workplace layout

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers assisting in the charting and analysis of basic manufacturing operations including assisting in the preparation of workplace layouts.
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### Application of the Unit

<b>Application of the unit</b>	<p>The unit covers basic principles of ergonomics, productivity improvements and quality procedures and work flow analysis.</p> <p>Work is conducted under supervision.</p> <p><b>Band: 0</b></p> <p><b>Unit Weight: 0</b></p>
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### Licensing/Regulatory Information

Not Applicable

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	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. Identify opportunities for workplace layout improvement	1.1. Basic analysis of workplace data is undertaken to determine sources of waste. 1.2. Future capacity requirement is obtained in accordance with policy and procedures. 1.3. Productivity improvement areas are established in accordance with organisational policy and procedures. 1.4. Appropriate productivity measures are established in conjunction with supervisors and other appropriate personnel.
2. Develop basic layout options for workplace improvement	2.1. Operation process charts, flow charts, flow process charts, and string diagrams etc. are used to develop basic layout options. 2.2. Information on ergonomics, health and safety hazards is considered in accordance with policy and procedures. 2.3. Improvements are developed in consultation with users and supervisors and in accordance with policy and procedures. 2.4. Simple economic appraisals for proposed improvements are developed in accordance with policy and procedures. 2.5. Layout options are referred to a higher authority for approval in accordance with policy and procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

Look for evidence that confirms skills in:

- communicating
- analysing
- documenting
- reviewing

**REQUIRED SKILLS AND KNOWLEDGE**

- applying principles of ergonomics
- applying productivity principles

**Required knowledge**

Look for evidence that confirms knowledge of:

- basic knowledge of workplace layout principles including at a basic level the degree to which workplace layout is affected by:
  - engineering processes and systems
  - materials flow patterns
  - types of production plant and machinery
  - materials handling methods
  - unit loads
  - types of production methods
- productivity:
  - definition and measures of productivity
  - factors affecting productivity
  - productivity and quality
  - value adding
- recording techniques:
  - flow charts
  - activity relationship charts
  - outline process charts
  - flow process charts
  - multipurpose charts
  - string diagrams
  - basic principle of ergonomics
  - the concept of waste and its application to productivity improvements

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>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.</p>	
<b>Overview of assessment</b>	A person who demonstrates competency in this unit must be able to assist in the design of basic workplace layout.
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
<b>Context of and specific resources for assessment</b>	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with assisting in the design of basic workplace layout, or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<b>Method of assessment</b>	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
<b>Guidance information for assessment</b>	

## 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.

<b>Waste</b>	<ul style="list-style-type: none"> <li>• Excess production and early production, waiting, materials queuing, not moving, people not working, transporting, double handling, poor process design, inventory, stores, buffers, lot sizes, inefficient performance of a process, reaching, bending, exertion</li> <li>• Making defective items, rework, rejects, unnecessary inspection</li> </ul>
<b>Information on ergonomics, health and safety hazards</b>	<ul style="list-style-type: none"> <li>• Standard references including NOHSC guidelines, any relevant Acts and Regulations, information contained in manufacturers' manuals, standard operating procedures</li> <li>• Workplace reports including: incident reports, commissioned studies, advice from relevant leaders/supervisors/workplace committees</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	
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## Co-requisite units

<b>Co-requisite units</b>		

## Competency field

Competency field	Engineering technician
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