



**Australian Government**

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

# **MEM30019A Use resource planning software systems in manufacturing**

**Release: 1**

## MEM30019A Use resource planning software systems in manufacturing

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers accessing and using Enterprise Resource Planning (ERP), Materials Requirement or Resource Planning (MRP) software systems in conjunction with Just in Time techniques.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to resource planning software systems. Work is carried out 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>		
<b>Path 1</b>	MEM16008A	Interact with computing technology

## 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. Use software interface	1.1. Keyboards, track ball/mouse and monitor and/or other peripherals are used to access system. 1.2. The system and the screens are navigated. 1.3. Messages are acknowledged. 1.4. Information is processed in the required format.
2. Access information	2.1. Relevant data and information is obtained from the system. 2.2. The status of items in the system is identified. 2.3. Historical data and information are accessed. 2.4. Information is interpreted and actions are prioritised.
3. Take appropriate actions	3.1. Actions are taken in response to resource planning information. 3.2. Follow-up is conducted as appropriate to ensure anticipated results have occurred. 3.3. Adjustments and variations are recorded according to 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:

- using basic computer functions
- analysing
- communicating
- undertaking production planning and control
- prioritising
- reading and interpreting
- recording

#### Required knowledge

Look for evidence that confirms knowledge of:

**REQUIRED SKILLS AND KNOWLEDGE**

- technical knowledge and skills needed to operate process
- hierarchy of ERP, MRP or similar systems and operation
- information available from and business activities exercised by/through the ERP, MRP system
- closed loop manufacturing system basics
- business planning, demand, resources
- Master Production Scheduling (MPS)
- Materials Requirement Planning (MRP)
- Capacity Requirement Planning (CRP)
- system inputs:
  - bills of material
  - need for accuracy
  - inventory statistics
  - planning data
  - introduction to capacity management
  - production activity control
- system outputs:
  - planned orders
  - order action
  - firm/tentative
- Just in Time (JIT)
  - techniques
  - production smoothing
  - single unit flow
  - Kanban
  - set up time reduction (SMED)
  - lead time reduction
- production control methods:
  - types
  - master schedules
  - control by exception
  - computer control
  - visual control
  - combination MRP2/Kanban system
  - shop floor - day-to-day - Kanban
- scheduling:
  - techniques
  - order release

**REQUIRED SKILLS AND KNOWLEDGE**

- policies
- centralised
- decentralised
- inventory control:
  - raw
  - work-in-process
  - finished goods
  - lean manufacture and inventory
  - inventory costs
  - procurement
  - material control techniques
  - ABC (Pareto) Analysis
  - Economic Order Quantity (EOQ)
  - Min-Max systems
  - Kanban - Just in Time
  - cycle counting

## 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>	
<p><b>Overview of assessment</b></p>	<p>A person who demonstrates competency in this unit must be able to use ERP, MRP planning software systems in manufacturing. Competency in this unit cannot be claimed until all prerequisites have been satisfied.</p>
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>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 to be capable of applying the competency in new and different situations and contexts.</p>
<p><b>Context of and specific resources for assessment</b></p>	<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 using ERP, MRP planning software systems in manufacturing, or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<p><b>Method of assessment</b></p>	<p>Assessors should gather a range of evidence that is valid, sufficient, current and authentic. 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 to be capable of applying the competency in new and different situations and contexts. 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 will have access to all tools, equipment, materials and</p>

<b>EVIDENCE GUIDE</b>	
	documentation required. The candidate will 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

<b>RANGE STATEMENT</b>	
<p>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.</p>	
<b>System</b>	Includes ERP, MRP or similar software programs
<b>Appropriate actions</b>	Appropriate actions are actions in regard to production schedules, materials management, purchasing and ordering, transport and logistics that are needed as a result of information obtained from resource planning software
<b>Resource planning information</b>	May include information from ERP, MRP or similar systems that provide information on master production schedule, materials requirement plan, capacity requirement plan, bills of material, inventory control and statistics, order action, schedules

## Unit Sector(s)

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

<b>Co-requisite units</b>		

## Competency field

<b>Competency field</b>	Engineering technician
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