



Australian Government

Department of Education, Employment and Workplace Relations

MEM07027B Perform advanced press operations

Release: 1

MEM07027B Perform advanced press operations

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers performing advanced press operations and recognising and rectifying deviations and faults in the product/output, raw material or feed stock, tooling and machine/process.
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Application of the Unit

Application of the unit	This unit applies to a range of metal working press operations including drawing, blanking, bending, coining, sizing, extruding, forming and shaping. This unit relates to operations where the output of the machine/ process can be varied at the discretion of the operator and where recognition/rectification skills are applied based upon product/material/process knowledge to achieve specified outcomes. Deviations and faults of the machine, raw material, tooling and process are recognised and rectified in accordance with standard operating procedures in order to meet the specification. Where interpretation of a technical drawing to Australian Standard 1100/1102 or equivalent is required, Unit MEM09002B (Interpret technical drawing) should also be selected. When production packaging and labelling of the finished goods or product is required, then Unit MEM11006B (Perform production packaging) should also be considered. Band: A Unit Weight: 6
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM07001B	Perform operational maintenance of machines/equipment
	MEM07024B	Operate and monitor machine/process
	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools

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. Determine job requirements	1.1. Drawings, job instructions and specifications are interpreted and task requirements are understood including machine/process selection and settings.
2. Observe safety precautions	2.1. Safety equipment and guards are checked for correct position and operation.
3. Conduct pre-start checks	3.1. Programmed operational maintenance is undertaken to standard operating procedures. 3.2. Pre-start checks are undertaken to standard operating procedures. 3.3. Equipment, raw material and tooling are verified to match task requirement.
4. Operate machine/process	4.1. Machine/process is started up safely and correctly. 4.2. Machine/process is operated in accordance with job instructions or standard operating procedures. 4.3. Components/feed stock is loaded and maintained consistent with production requirements. 4.4. Machine/process output is unloaded safely to standard operating procedure, as required. 4.5. Machine/process output is handled and stored in a manner not likely to cause damage, as required. 4.6. Production data is recorded to standard operating procedures.
5. Monitor machine/process	5.1. Machine/process is monitored for safe and correct operation. 5.2. Emergency procedures are understood and followed in accordance with standard operating procedures.
6. Recognise and rectify deviations and faults in product/output	6.1. Product faults/deviations such as splits, warping, deformation, dimensional errors etc. are recognised from standard operating procedures, job sheets or other documentation. 6.2. Product faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation and may be achieved by adjustment of machine/process settings within parameters.
7. Recognise and rectify deviations and faults with raw material/feed stock	7.1. Raw material faults/deviations such as gauge variation, hardness, colour variation etc. are recognised from standard operating procedures, job sheets or other documentation.

ELEMENT	PERFORMANCE CRITERIA
	7.2.Raw material faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation.
8. Recognise and rectify deviations and faults in tooling	8.1.Tooling faults/deviations resulting in marks, missing detail, dimensional errors etc. are identified against specifications and reported to standard operating procedure. 8.2.Tooling faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation.
9. Recognise and rectify deviations and faults in machine/process	9.1.Machine/process faults/deviations resulting in splits, distortion etc. are recognised from standard operating procedures, job sheets or other documentation. 9.2.Machine/process faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation.

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:

- locating, reading and interpreting information on written job instructions, specifications, drawings, charts, lists and other reference documentation
- following job/process instructions
- checking and clarifying task-related information
- orally reporting routine information
- following oral instruction
- entering routine and familiar information onto proformas and standard workplace forms
- undertaking manual handling
- selecting appropriate processes for nominated materials
- determining required adjustments to process
- identifying and rectifying faults/deviations in product, process, tooling and machine

REQUIRED SKILLS AND KNOWLEDGE**Required knowledge**

Look for evidence that confirms knowledge of:

- characteristics and properties of materials
- job requirements
- documentation requirements
- pre-start checks
- machine/process start-up and unloading procedures
- production recording and reporting requirements
- types of product, process, tooling and machine faults/deviations and corrective actions
- procedures to be followed in emergency situations
- consequences of improper handling and storing of finished work
- consequences of selecting incorrect processes for nominated materials
- component/feed stock levels to ensure continuous process
- programmed operational maintenance requirements
- use and application of personal protective equipment
- safe work practices and procedures
- hazards and control measures associated with advanced press operations

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

A person who demonstrates competency in this unit must be able to perform advanced press operations. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

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

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.

Context of and specific resources for assessment

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.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with advanced press operations or other units requiring the exercise of the skills and knowledge covered by this unit.

Method of assessment

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.

EVIDENCE GUIDE**Guidance information for assessment****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.

Machine/process

Range of metal working press operations including drawing, blanking, bending, coining, sizing, extruding, forming and shaping etc.

Faults/deviations

Deviations and faults of the machine, raw material, process equipment and process:

- splits, warping, deformation, dimensional errors etc.
- gauge variation, hardness, colour variation etc.
- marks, missing detail, dimensional errors etc.
- distortion

Unit Sector(s)**Unit sector****Co-requisite units****Co-requisite units**

Co-requisite units		

Competency field

Competency field	Machine and process operations
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