



Australian Government

Department of Education, Employment and Workplace Relations

PMC552024C Hand mould products

Revision Number: 1

PMC552024C Hand mould products

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the hand moulding of ceramic, plaster and other materials and the production of special purpose components/products. It involves selecting and preparing moulds, finishing and storing components and rectifying faults or equipment failures.
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Application of the Unit

Application of the unit	This unit of competency applies to operators who are responsible for determining production requirements and quantities from production schedules and product requirements from specifications or similar documents. This unit involves the hand moulding of clay, ceramic, plaster and other products and may also be relevant to craft practitioners producing ceramic work. This competency is typically performed by operators working either independently or as part of a team.
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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. Assemble and prepare the mould or former	1.1. Establish a safe working environment to procedures 1.2. Identify and prepare the appropriate mould or former 1.3. Level and secure the mould or former to procedures 1.4. Check that the base is stabilised and correctly mounted as required to facilitate rolling or turning out 1.5. Position inserts or loose pieces as required 1.6. Apply the correct stripping agent
2. Mould materials	2.1. Prepare the material mix or obtain the material from the batch preparation unit 2.2. Provide an adequate supply of material to meet production requirements 2.3. Introduce material to the workpiece cavity and compact to procedures 2.4. Check inserts or loose pieces and secure to avoid movement during moulding 2.5. Employ safe working practices consistent with procedures 2.6. Roll and strip/turn out the component for finishing
3. Finish the component/ product	3.1. Repair defects occurring during the moulding process 3.2. Remove inserts or loose pieces and replace in mould or former 3.3. Prepare the surface of the component for the application of any surface finishes 3.4. Cure or dry the components to specification 3.5. Return mould and/or segments for re-use or storage in accordance with requirements
4. Rectify routine problems	4.1. Identify the range of faults that can occur during the operation 4.2. Determine and rectify fault causes according to procedures 4.3. Identify and rectify equipment failure causes according to procedures 4.4. Make sure appropriate records and log books of equipment operations are maintained to meet procedures 4.5. Identify non-routine problems and report to designated person

ELEMENT	PERFORMANCE CRITERIA
5. Inspect and store components	5.1. Inspect component for defects 5.2. Store the component to specifications and procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Required skills include:

- recognising abnormal operating conditions and alerting appropriate individuals
- implementing enterprise procedures and relevant regulatory requirements within appropriate time constraints and in a manner relevant to the operation of the equipment/process
- reading and numeracy to interpret workplace documents and technical information

Required knowledge

Required knowledge includes:

- appropriate preparation and handling of moulds and formers
- preparation of adequate material mix and standards
- preparing, curing and drying components to specifications
- safe completion of hand moulding products
- appropriate safety procedures concerning the handling of moulds and formers
- procedures relating to the reporting of hazardous conditions
- the content of and handling characteristics of the materials being moulded

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

The unit will be assessed in as holistic a manner as is practical and may be integrated with the assessment of other relevant units of competency.

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

Competence must be demonstrated in the ability to recognise situations requiring action and then in implementing appropriate corrective action. Consistent performance should be demonstrated. In particular look to see that:

- types of raw materials and finishing materials are able to be identified
- OHS and safe work practices are followed
- component movements are accompanied by appropriate safe working practices
- preparation of moulds and moulding materials to specification
- basic mould or former maintenance and inspection practices are carried out.

Context of and specific resources for assessment

Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations.

Assessment will occur over a range of situations which will include disruptions to normal, smooth operation.

Simulation or case studies/scenarios may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual plant and will include 'walk-throughs' of the relevant competency components. A bank of scenarios/case studies/what ifs and questions will be required to probe the reasoning behind observable actions.

Method of assessment

Individual enterprises may choose to add prerequisites and co-requisites relevant to their processes.

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.	
Procedures	All operations are performed in accordance with standard procedures and work instructions
Typical problems	Typical problems may include: • maintaining correct distribution and compaction of materials • maintaining sectional profiles in accordance with specifications • maintaining cleanliness and specification of materials
Occupational health and safety (OHS)	All operations are subject to stringent OHS requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OHS requirements, the OHS requirements take precedence

Unit Sector(s)

Unit sector	Operational/technical
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		