



Australian Government

Department of Education, Employment and Workplace Relations

PMC552057B Finish casting operation

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the positioning and fitting of accessories and reinforcement to manufactured concrete products before they have been cured. It involves ensuring the stability of the mould, correctly positioning mould components, ensuring reinforcing is correctly placed and ensuring finished product is to specification.
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Application of the Unit

Application of the unit	This unit of competency applies to operators who are responsible for positioning and fitting accessories and reinforcements into concrete components. It may be used to top up and finish manufactured concrete products to specification. This unit of competency includes: • matching concrete to specification • fitting accessories and reinforcing • veneering • the positioning and fitting of accessories and reinforcement before curing, • veneering • topping up of moulded concrete products • the operation of all ancillary equipment. This competency is typically performed by operators working either independently or as part of a work 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. Adjust and level mould and accessories	1.1.Ensure position of mould base is level and stabilised according to standard operating procedures 1.2.Adjust level of pipes and other accessories already fitted as required
2. Position and fit reinforcement and accessories	2.1.Place reinforcement in green concrete according to work as required 2.2.Place fittings/accessories in concrete to specification
3. Top up mould and finish	3.1.Top up and cover mould according to work instructions 3.2.Finish and patch product to specification 3.3.Clean mould and work site as required by good occupational hygiene practices
4. Rectify routine problems	4.1.Identify the range of faults that can occur during the operation 4.2.Determine and rectify fault causes by procedures/work instructions 4.3.Identify and rectify equipment failure causes in accordance with procedures/work instructions 4.4.Ensure appropriate records and log books of equipment operations are maintained to meet procedures/work instructions 4.5.Identify non-routine problems and report to designated person
5. Control hazards	5.1.Identify hazards from the job to be done 5.2.Identify other hazards in the work area 5.3.Assess the risks arising from those hazards 5.4.Implement measures to control those risks in line with 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 conditions which will lead to out of specification product and taking appropriate action
- implementing the enterprise's procedures within time constraints and in a manner relevant to the correct use of the equipment
- conveying information relevant to the operation clearly and effectively
- maintaining appropriate levels of quality assurance
- reading and numeracy to interpret workplace documents and technical information

Required knowledge

Required knowledge includes:

- topping up and finishing process
- principles of concrete mixing
- principles of reinforcing concrete to specification
- principles of fitting accessories to specification
- principles of concrete product finishing
- underlying causes of faults such as precipitated by:
 - material
 - mixing
 - application
 - finishing

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

It is essential that the process be understood and that the importance of critical material properties, mixing variables, topping up and fitting of accessories is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate corrective action.

Consistent performance should be demonstrated. In particular look to see that:

- reinforcing is fitted according specification
- accessories are fitted as required by work instructions
- moulded product is level, according to specification.

Competence must be demonstrated in the operation of all ancillary equipment to the level required for this unit of competency.

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 processes and techniques must be culturally

EVIDENCE GUIDE**assessment**

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 accessories

Typical accessories may include:

- hooks
- pipes
- rubber tubing

Typical veneering

Typical veneering may include:

- screeding
- floating
- helicopter floating
- brushing

Occupational health and safety (OHS)

The identification and control of hazards and the application of OHS is to be in accordance with current, applicable legislation and regulations, and company procedures. All work is carried out at all times in accordance with these requirements

Unit Sector(s)**Unit sector**

Operational/technical

Competency field

Competency field	
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Co-requisite units

Co-requisite units		