



Australian Government

MSMPMC319 Finish casting operation

Release: 1

MSMPMC319 Finish casting operation

Modification History

Release 1. New unit. Supersedes and is equivalent to PMC552057 Finish casting operation

Application

This unit describes the skills and knowledge required to finish casting operations by fitting reinforcement and accessories to products before curing.

This unit applies to operators who are required to take responsibility for own outputs and follow established procedures to ensure the mould is stable, position reinforcement and fittings and top up and cover mould. Operators are also required to work autonomously and apply their own judgement to interpret information; monitor processes; identify and address routine and non-routine problems and control hazards.

This unit applies to an individual working alone or as part of a team or group and in liaison with other shift team members, team leader and supervisor.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil

Competency Field

Operations

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Adjust and level mould and accessories	1.1 Ensure position of mould base is level and stabilised according to standard operating procedures (SOPs) 1.2 Adjust level of pipes and other accessories already fitted
2. Position and fit reinforcement and accessories	2.1 Place reinforcement in green concrete 2.2 Place fittings and accessories in concrete to specification
3. Top up mould and finish	3.1 Top up and cover mould according to work instructions

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	3.2 Finish and patch product to specification 3.3 Clean mould and work site
4. Rectify routine problems	4.1 Identify and rectify faults and equipment failure 4.2 Maintain records and log books of equipment operations 4.3 Identify non-routine problems and report to designated person
5. Control hazards	5.1 Identify finishing hazards 5.2 Assess the risks arising from those hazards 5.3 Implement measures to control those risks

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

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Links

Companion Volume Implementation Guides are available at VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMPMC319 Finish casting operation

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- finished casting operations for at least 1 product, including:
 - monitoring the following key variables to ensure product integrity and conformance to specification:
 - types of reinforcement and fittings
 - placement and securing of reinforcement and fittings
 - amount and distribution of concrete in mould
 - applied finishing and veneering techniques, including at least 1 of the following:
 - screeding
 - floating
 - helicopter floating
 - brushing
 - recognising possible causes of the following routine problems:
 - variations in materials
 - wrong materials
 - mould anomalies
 - process errors.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- topping up and finishing process
- common veneering techniques, including:
 - screeding
 - floating
 - helicopter floating
 - brushing
- principles of concrete mixing
- hazards from pre-stressed reinforcement
- role of reinforcement, types of reinforcement and significance of concrete cover

- the potential effects of variations in raw materials and equipment operation and processes in relation to quality of product
- routine problems and factors which may affect product quality or production output, their probable causes and relevant corrective actions
- finishing hazards and:
 - their possible causes
 - potential consequences
 - risk control procedures.
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - reinforcement, fittings, accessories and moulds
 - finishing or veneering tools and materials
 - specifications, procedures and job sheets
- modelling of industry operating conditions, including:
 - routine and non-routine problems.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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