



Australian Government

MSMPMC307 Operate a calcining kiln

Release: 1

MSMPMC307 Operate a calcining kiln

Modification History

Release 1. New unit. Supersedes and is equivalent to PMC552010 Operate a calcining kiln.

Application

This unit describes the skills and knowledge required to operate a calcining kiln and ancillary equipment. It applies to a large production context where calcining operations are used to make cement, lime, plaster or similar products.

This unit applies to operators who are required to take responsibility for own outputs and follow established procedures to prepare, monitor and adjust the equipment and load raw materials. 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 does not require the operation of a central control panel.

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. Prepare the equipment for prouction	1.1 Conduct equipment pre-start procedures and visual checks according to enterprise procedure checklist 1.2 Set up and configure equipment start-up function complying with procedures 1.3 Load raw materials

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Operate and monitor equipment	2.1 Start up and operate equipment in accordance with work instructions 2.2 Check on the operation of support equipment and on bulk storage silos 2.3 Monitor equipment performance 2.4 Monitor non-conforming product against customer specifications 2.5 Adjust and control equipment to ensure correct product quality 2.6 Complete final inspection checks 2.7 Complete appropriate records and logs
3. Shut down equipment	3.1 Ensure line is clear of all product and left ready for shutdown 3.2 Shut down equipment and complete appropriate records and logs
4. Prepare equipment for maintenance	4.1 Isolate equipment 4.2 Remove any broken materials safely 4.3 Make sure area is clear and safe for maintenance
5. Rectify routine problems	5.1 Identify and rectify faults and equipment failure 5.2 Maintain records and log books 5.3 Identify non-routine problems and report to designated person
6. Control hazards	6.1 Identify hazards in the calcining work area 6.2 Assess the risks arising from those hazards 6.3 Implement measures to control those risks 6.4 Shut down equipment in an emergency

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Release 1. New unit. Supersedes and is equivalent to PMC552010 Operate a calcining kiln.

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 MSMPMC307 Operate a calcining kiln

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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:

- set up, configured, started and operated the calcining kiln to achieve required output according to procedures on at least 1 occasion, including:
 - recognising possible causes of the following routine problems:
 - raw material variations
 - mechanical abnormalities
 - electrical and instrument reading variations.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of calcining process
- calcining tools and equipment, including:
 - functions, limitations
 - start up, operation and shutdown procedures
- composition and nature of raw materials and finished product
- the potential effects of variations in raw materials and process conditions in relation to quality of product and output
- routine problems and factors which may affect product quality or production output, their probable causes and relevant corrective actions
- sequence of isolation procedures and related hazards
- signals and alarms
- enterprise production schedules
- work health and safety (WHS) requirements relevant to work outcome
- calcining 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:
 - calcining equipment and ancillary equipment
 - raw 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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