



Australian Government

MSMPMC306 Operate crushing equipment

Release: 1

MSMPMC306 Operate crushing equipment

Modification History

Release 1. New unit. Supersedes and is equivalent to PMC552008 Operate crushing equipment.

Application

This unit describes the skills and knowledge required to operate crushing equipment and ancillary equipment. Crushing is typically applied in the manufacture minerals products industry to raw materials, materials in process, product and scrap and recycled material.

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 maintain supply of 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 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 to crush materials	1.1 Check equipment for hazards, danger and isolation tags in accordance with standard operating procedures (SOPs) 1.2 Perform checks to ensure all doors, inspection openings and guards are in position and secure 1.3 Adjust equipment settings to ensure conformance with SOPs 1.4 Notify appropriate personnel of intention to start equipment

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Conduct additional pre-start checks 1.6 Confirm an adequate supply of materials is available to meet production requirements
2. Crush materials	2.1 Start equipment in sequence in accordance with SOPs 2.2 Monitor instrument and control panels and adjust equipment, controls and feed as necessary to remain within specified operating and safety parameters 2.3 Make physical inspections of plant and equipment at specified intervals as required by SOPs 2.4 Maximise product throughput and efficiency to maintain target parameters 2.5 Check screens and screened material 2.6 Communicate with appropriate personnel regarding the status of operations 2.7 Adjust to achieve required output 2.8 Distribute material as required
3. Rectify routine problems	3.1 Identify and rectify faults and equipment failures 3.2 Maintain records and log books of equipment operations 3.3 Identify non-routine problems and report to designated person
4. Control hazards	4.1 Identify hazards in the crushing work area 4.2 Assess the risks arising from those hazards 4.3 Implement measures to control those risks

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 PMC552008 Operate crushing equipment.

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 MSMPMC306 Operate crushing equipment

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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 crushing equipment according to procedures to achieve the required output 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:
 - crushing process
 - control of process
- crushing and ancillary equipment, including:
 - functions, limitations
 - startup, operation and shutdown procedures
 - the potential effects of equipment operations in relation to quality of product and output
- types of materials commonly crushed
- the potential effects of variations in raw materials 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
- crushing hazards and:
 - their possible causes

- potential consequences
- risk control procedures.

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:
 - crushing 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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