



Australian Government

MSMPMC303 Operate grinding equipment

Release: 1

MSMPMC303 Operate grinding equipment

Modification History

Release 1. New unit. Supersedes and is equivalent to PMC552003 Operate grinding equipment.

Application

This unit describes the skills and knowledge required to operate grinding and ancillary equipment to reduce the size of raw materials, materials in process, product, scrap and recycled material.

This unit applies to operators who are required to take responsibility for own outputs and follow established procedures to conduct pre-start checks, prepare materials, start and operate equipment, facilitate output changes and distribute ground 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 grind materials	1.1 Check equipment for hazards, danger and isolation tags 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 standard operating procedures (SOPs)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Notify appropriate personnel of intention to start equipment 1.5 Conduct additional pre-start checks as required in accordance with SOPs 1.6 Check adequate supply of materials is available to meet production requirements
2. Grind materials	2.1 Start equipment in sequence in accordance with SOPs 2.2 Monitor instrument and control panels and adjust as necessary to remain within specified operating parameters 2.3 Make physical inspections of plant and equipment at specified intervals to identify any anomalies 2.4 Maximise product throughput and efficiency to maintain target parameters 2.5 Communicate with appropriate personnel regarding the status of operations 2.6 Employ safe working practices 2.7 Shut down equipment and complete required records
3. Distribute ground product	3.1 Distribute ground materials to their correct silo or storage area 3.2 Monitor silo or storage areas to ensure compliance with enterprise storage quality and quantity requirements
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 hazards in the grinding work area 5.2 Assess risks arising from those hazards 5.3 Implement measures to control those risks 5.4 Shut down 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 PMC552003 Operate grinding 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 MSMPMC303 Operate grinding 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 and operated the grinding equipment according to procedures to grind and distribute materials on at least 1 occasion, including:
 - monitoring the following key variables to ensure product integrity and conformance to specification:
 - process conditions and parameters
 - feed rates
 - temperature
 - moisture
 - recognising possible causes of the following routine problems:
 - raw material variations
 - process problems
 - mechanical abnormalities
 - electrical and instrument reading variations
 - equipment faults, damage or failure.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- grinding process
- equipment and ancillary equipment, including:
 - start-up, operation and shutdown procedures
 - functions and limitations of the grinding system
 - the potential effects of equipment operation in relation to quality of product and output
- types of materials and additives typically subject to grinding and impact on grinding processes
- the potential effects of variations in raw materials in relation to quality of product and output
- routine problems and factors that impact on product quality or production output, their probable causes and relevant corrective actions
- enterprise production schedules

- work health and safety (WHS) requirements relevant to work outcome
- grinding hazards that may arise in the job and work environment 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:
 - grinding equipment and ancillary equipment
 - materials to grind
 - 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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