



Australian Government

RIIMPO205B Operate roller/compactor

Release: 1

RIIMPO205B Operate roller/compactor

Modification History

Not applicable.

Unit Descriptor

This unit covers operating of roller/compactors in metalliferous mining operations. It includes: planning and preparing for operations; carrying out compacting; and conducting housekeeping activities.

Note: the title of this unit is Operate roller/compactor, it is displayed as Operate roller_compactor because the TGA content management system does not accept '/' as text.

Application of the Unit

This unit is appropriate for those working in mobile plant operator roles, in surface operations within:

- Metalliferous mining
- Coal mining
-

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

| | |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Elements describe the essential outcomes of a unit of competency.</p> | <p>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.</p> |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Plan and prepare for operations | 1.1. Access, interpret and apply compliance documentation relevant to operating of roller and compactors 1.2. Receive, interpret and clarify shift change over details 1.3. Select appropriate type of equipment and/or attachments according to job specifications and to maximise efficiency and effectiveness of work activities 1.4. Identify, address and report potential hazards and risks 1.5. Select personal protective equipment appropriate for work activities 1.6. Conduct equipment pre-start checks to ensure equipment is ready for operation 1.7. Identify, address and report environmental issues 1.8. Communicate with other personnel using approved communication methods 1.9. Adhere to emergency procedures to ensure safety of personnel, plant and equipment |
| 2. Carry out compacting | 2.1. Carry out start-up, park and shutdown procedures 2.2. Operate equipment within recommended speed, engine capability and limitations 2.3. Manoeuvre equipment to maximise efficiency and ensure safety of other equipment and personnel 2.4. Assess materials and site conditions to determine appropriate operation technique 2.5. Remove or manage contaminants upon identification 2.6. Compact to required degree of compaction 2.7. Monitor equipment performance utilising appropriate indicators to aid efficient operations |
| 3. Conduct housekeeping activities | 3.1. Clean equipment 3.2. Clean and store attachments and other ancillary equipment 3.3. Complete all required records and |

| | |
|--|---------------------------------------|
| | documentation accurately and promptly |
|--|---------------------------------------|

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to operate roller/compactors:

- apply legislative, organisation and site requirements and procedures
- engage and disengage compacting device
- operate under variable ground conditions and grades
- apply diagnostic techniques
- apply hazardous goods handling techniques
- interpret plans, reports, maps, specifications
- apply appropriate lifting techniques to remove items from path of plant
- apply work task organising procedures
- apply defect reporting requirements and procedures
- apply safe work practices
- apply troubleshooting techniques
- use communications equipment/use computer systems
- use hand and power tools

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to operate roller/compactors:

- compacting procedures
- emergency procedures
- fatigue management
- environmental and heritage procedures
- equipment processes, technical capability and limitations
- equipment safety requirements
- geological and technical data
- hazardous goods procedures and consequences of spills
- isolation procedures
- mine operational system
- night and day working procedures
- OHS procedures
- open cut procedures
- operational procedures and checks
- road rules
- shutdown procedures

- site procedures
- site safety requirements
- start-up procedures
- surface maintenance techniques

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

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following:

- knowledge of the requirements, procedures and instructions for operating roller/compactors
- implementation of requirements, procedures and techniques for the safe, effective and efficient operation of roller/compactors
- working with others to undertake and complete the operation of roller/compactor that meets all of the required outcomes
- consistent timely operation of roller/compactors that safely, effectively and efficiently meets the required outcomes

Context of and specific resources for assessment

- This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills.
- The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.
- Customisation of assessment and delivery environment to sensitively accommodate cultural diversity.
- Aboriginal people and other people from a non English speaking background may have second language issues.

| | |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <ul style="list-style-type: none"> • Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances. • Where applicable, physical resources should include equipment modified for people with disabilities. • Access must be provided to appropriate learning and/or assessment support when required. |
| Method of assessment | <p>This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods:</p> <ul style="list-style-type: none"> • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • working with others to undertake and complete the roller/compactors operations |
| Guidance information for assessment | <p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p> |

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.

| | |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Relevant compliance documentation may include:</p> | <ul style="list-style-type: none"> • legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • codes of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation |
| <p>Rollers and compactors may include:</p> | <ul style="list-style-type: none"> • dozer • front end loader where rollers are attached • rollers • tractors |
| <p>Capacity of equipment and/or attachments may include:</p> | <ul style="list-style-type: none"> • duration of operation • efficient and safe operating speed • operating limitations • type of activities performed • weight and/or load limitations |
| <p>Potential hazards and risks may include:</p> | <ul style="list-style-type: none"> • abandoned equipment • adjoining pit walls • adverse weather conditions (electrical storms, floods) fires • chemicals • contaminants • equipment • fences • holes • materials • over-hanging rocks • personnel • pot holes • unsafe ground • unstable faces • vehicles |

| | |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-start checks may include: | <ul style="list-style-type: none"> • air filter restriction indicator • cab (horn, lights, air conditioner) • computer systems • display instrumentation and gauges (indicators, gauges, laser levels) • engine and stop engine lights (orange and red) • fluid levels (windscreen washer tank, hydraulic oil, coolant, grease, water, engine oil, fuel) • visual and audio warning devices and lights |
| Environmental issues may include: | <ul style="list-style-type: none"> • culturally- sensitive sites and artefacts • drainage • dust • emissions • flora and fauna • hazardous chemicals • heritage legislation • noise • runoff • spills • water quality |
| Start-up, park and shutdown procedures may include: | <ul style="list-style-type: none"> • correct location of equipment • safety mechanisms operational (horn, operating lights) • vehicle is left secured |
| Materials may include: | <ul style="list-style-type: none"> • gravel • ore • overburden • oxidised waste • rejects • road base • rubbish • sand • sulphide rock fill • tailings • topsoil • water |
| Site conditions may include: | <ul style="list-style-type: none"> • broken ground • day and night • degree of compaction • location of water table • slope of working surface |

| | |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <ul style="list-style-type: none"> • stable ground (compaction) amount of scale • wet and dry • working over old underground workings and voids |
| Contaminants may include: | <ul style="list-style-type: none"> • animal carcasses (sheep, cows, kangaroos) • cigarette butts • consumables • ear plugs • metal bucket teeth • metal or steel rods • old fencing • old piping • plastic • timber |
| Indicators may include: | <ul style="list-style-type: none"> • brake air pressure • brake oil temperature • computer indicators • engine oil pressure • fuel filter • parking brake • retarder • service meter • speedometer/odometer • steering filters • tachometer • torque converter oil temperature • transmission filter • voltmeter • water temperature |
| Cleaning methods may include: | <ul style="list-style-type: none"> • water • steam cleaning • degreasing • vacuum • forced air |

Unit Sector(s)

Mobile Plant Operations

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.