



Australian Government

RIIMPO330E Conduct bucket-wheel operations

Release: 1

RIIMPO330E Conduct bucket-wheel operations

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to operate and excavate using a bucket-wheel excavator.

This unit applies to those working in site based roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors, and must be sourced from state jurisdictions prior to applying this unit.

Unit Sector

Coal mining

Metalliferous mining

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and prepare for bucket-wheel operations	1.1 Access, interpret and apply bucket-wheel operations documentation 1.2 Obtain, interpret, clarify and confirm work requirements 1.3 Identify hazards and environmental issues, assess the risks and implement control measures in line with workplace policies 1.4 Select and wear personal protective equipment required for work activities 1.5 Access, interpret and apply geological and survey data required to complete the work activity 1.6 Select required bucket wheel equipment and confirm suitability for

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	work activities 1.7 Obtain and interpret emergency procedures for bucket wheel excavators, and be prepared for fires, accidents and emergencies 1.8 Coordinate and communicate planned activities with others at the site prior to commencement of work activity
2. Operate bucket-wheel excavator in line with established requirements to complete work activity	2.1 Carry out prestart and start-up checks in line with workplace procedures 2.2 Identify faults or defects and rectify or report within scope of own responsibility and according to workplace procedures 2.3 Drive and operate bucket-wheel to remove and place burden using techniques suited to equipment capabilities, site and work conditions, and according to workplace procedures 2.4 Monitor and manage equipment performance using indicators and alarms in accordance with manufacturers' specifications 2.5 Monitor hazards and risks during operations, and ensure safety of self, other personnel, plant and equipment 2.6 Park up, shut down, secure and carry out post operational inspection of equipment in line with workplace procedures
3. Relocate bucket-wheel excavator	3.1 Receive and confirm route and location plan and perform site inspection to confirm suitability 3.2 Complete ground preparation 3.3 Carry out cable location and handling in a safe manner 3.4 Coordinate use of support equipment and personnel 3.5 Relocate bucket wheel excavator in line with workplace procedures
4. Conduct housekeeping activities	4.1 Clear work area and dispose of or recycle materials in line with workplace procedures 4.2 Manage and/or report hazards to maintain a safe working environment 4.3 Complete and file or distribute documentation in a manner that complies with workplace practices

Foundation Skills

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

Skill	Description
Reading	Identifies and interprets relevant information from workplace procedures, documentation, legislation and regulations
Numeracy	Uses equipment operating capacity schedule to confirm safe weight load limits

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIMPO330E Conduct bucket-wheel operations (Release 1)	RIIMPO330D Conduct bucket-wheel operations (Release 4)	Minor updates to reflect changes to operator maintenance activities	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIIMPO330E Conduct bucket-wheel operations

Modification History

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Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 3.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit.

The candidate must demonstrate completion of bucket-wheel operations that safely, effectively and efficiently follows workplace procedures to carry out work activity on at least two occasions, and include:

- conducting prestart and stat-up checks prior to commencing operations and shutdown procedures on completion of operations
- positioning and digging of burden as part of a terrace dig
- rehandling and responding to changes in depth, grade and crossfall
- relocating bucket-wheel excavator
- identifying and responding to alarms and signals
- driving and operating bucket-wheel and adjusting techniques to suit site conditions
- steering, traveling and maintaining alignment of bucket-wheel parking and securing of equipment

In the course of the above work the candidate must also:

- locate and apply relevant documentation, policies and procedures
- select and wear personal protective equipment required for work activities
- implement the requirements, procedures and techniques for the safe, effective and efficient completion of bucket-wheel operations
- carry out vehicle refuelling requirements and procedures where applicable
- apply safe work practices and identify and report all potential hazards, risks and environmental issues
- apply problem solving and troubleshooting techniques when operating equipment
- select and use the required tools and equipment
- monitor and manage equipment performance using indicators and alarms
- identify common equipment faults
- carry out housekeeping activities

- use a range of communications techniques and equipment essential to the safe completion of the work instructions
- meet written and verbal reporting requirements and procedures associated with bucket-wheel operations
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Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements and performance criteria of this unit. This includes:

Key policies, procedures, legislation and established requirements for bucket wheel operation, including those relating to:

- recycling materials
- responding to fire, accidents and emergencies
- site traffic codes
- site isolation
- project quality requirement
- environmental requirements and constraints
- work health and safety, including signs of operator fatigue and management
- fault identification and operational maintenance

Key site information, including:

- basic geological and survey data
- plans and maps

Key factors affecting work activities described in performance evidence above, including:

- technical capabilities and limitations
- equipment specifications
- ground conditions

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
 - a bucket wheel
 - materials to be shifted
 - personal protective equipment
- be conducted in a safe environment; and,
- be assessed in context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory competency standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing a high level of RII training product knowledge
- having an understanding and knowledge of legislations and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and
- the minimum years of current** work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must hold the relevant vocational competencies and have current industry skills directly relevant to the training and assessment being provided and must work alongside a trainer and/or assessor to conduct the assessment. This means the industry subject matter expert should hold the unit being assessed (or an equivalent unit), and must also demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

Industry sector	AQF indicator level***	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Infrastructure	1	1 Year
	2	2 Years
Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure	3-6	3 Years

Other sectors	Where this unit is being assessed outside of the resources and infrastructure sectors assessor and/or industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no industry standard is specified should comply with any relevant regulation.
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*Guidance on simulated environments has been stipulated in the RII implementation guide located on VETNet.

**Assessors can demonstrate current work experience through employment within industry in a role relevant to the outcomes of the unit; or, for external assessors this can be demonstrated through exposure to industry by conducting a minimum number of site assessments as determined by the relevant industry sector, across various locations.

*** While a Unit of Competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

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