



Australian Government

RIIUND301E Operate manual winder

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 5.0.

Application

This unit describes the skills and knowledge required to operate manual winders in coal and metalliferous mining, including for personnel and equipment haulage operations.

It applies to those working in operational roles. They generally work under minimal supervision to undertake a broad range of tasks in varied work contexts, using some discretion and judgement in selecting equipment, services or contingency measures.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories and industry sectors. Users must check requirements with relevant body before applying the 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 manual winder operations	1.1 Obtain, interpret, confirm and clarify shift changeover details 1.1 Access, interpret and apply documentation required for operating manual winders 1.3 Select and wear personal protective equipment according to site requirements 1.4 Perform equipment and work area pre-operational checks and confirm equipment is ready for operation according to site requirements 1.5 Check records for outstanding maintenance and inspections, record defects and respond according to manufacturer specifications and

ELEMENT	PERFORMANCE CRITERIA
	site requirements 1.6 Identify, address and report defects and potential hazards and risks according to site requirements 1.7 Carry out start-up procedures and confirm work area is clear for operations according to site requirements 1.8 Identify and address potential risks, hazards and environmental issues and implement control measures according to site requirements 1.9 Apply dust suppression and extraction methods according to site requirements 1.10 Confirm control cabin meets site requirements
2. Haul personnel	2.1 Communicate with relevant personnel within scope of own role 2.2 Confirm cage is ready for operations 2.3 Initiate the system, follow start-up procedures and operate personnel cage according to manufacturer specifications, site requirements and directions from person in charge of cage 2.4 Monitor and manage cage performance using appropriate indicators 2.5 Adjust speed and movement as required 2.6 Carry out shutdown procedures manufacturer specifications and site requirements
3. Haul equipment/ materials	3.1 Communicate with relevant personnel within scope of own role 3.2 Confirm cage and skip is ready for operation 3.3 Initiate the system, follow start-up procedures and transport equipment using manual winder according to manufacturer specifications and site requirements 3.4 Adjust speed and movement as required 3.5 Monitor and manage cage and/or skip performance using appropriate indicators 3.6 Carry out shutdown procedures manufacturer specifications and site requirements
4. Carry out winder inspections	4.1 Isolate and prove isolation of equipment according to manufacturer specifications and site requirements 4.2 Inspect winder and auxiliary equipment and report faults/defects according to site requirements 4.3 Prepare winder for routine servicing according to manufacturer specifications and site requirements
5. Conduct end-of shift activities	5.1 Complete required written documentation according to site requirements 5.2 Pass on end-of-shift information and hand over control to oncoming shift according to site requirements

ELEMENT	PERFORMANCE CRITERIA
	5.3 Confirm control room meets workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Numeracy	Calculates basic measurements including masses and dimensions
Reading	Identifies and interprets information from workplace documentation and legislation
Self-management	Monitors and minimises own exposure to worksite risks and hazards during activities
Writing	Completes workplace reports using sector-specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIIUND301D Operate manual winder.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for RIIUND301E Operate manual winder

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- operate manual winder on at least two occasions, including:
 - completing start-up and shutdown procedures
 - applying dust suppression and extraction methods
 - energising the system
 - completing personnel haulage operations
 - completing equipment haulage operations
 - monitoring and managing cage and skip performance
 - isolating and inspecting winder.

During the above, the candidate must:

- locate and apply relevant documentation, policies and procedures and confirm work activity is compliant
- work effectively with others to operate manual winders in a way that meets required outcomes, including:
 - organising work activities to meet task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - complying with reporting requirements and procedures
 - determining coordination requirements throughout work activities.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key legislation required to operate manual winders, including those relating to:

- mining safety and health
- mine inspection
- work health and safety
- explosives
- key policies, procedures and documentation required to operate manual winders
- techniques for using hand tools required for manual winder operations
- techniques for operating manual winders in drifts, tunnels and inclines, including those for:
 - start-up, including:
 - conducting pre-start inspections, checks and tests
 - setting winding mode
 - checking advisory signals indicating impending movement of conveyance
 - carrying out test-winding-cycle
 - energising the system, including:
 - activating power supply/start diesel motor-generator
 - running up hydraulic/pneumatic and relevant auxiliary equipment
 - checking fault indicators
 - monitoring and managing cage performance, relating to the following:
 - duration of operation
 - efficient and safe operating speed
 - operating limitations
 - type of activities performed
 - weight and/or load limitations
 - shutdown, including:
 - de-activating power/stopping diesel prime mover
 - shutting down motor-generator set/exciters/exhaust and cooling fans/hydraulic drive
 - shutting down hydraulic/pneumatic and relevant auxiliary equipment
 - cleaning
- characteristics, technical capabilities and limitations of manual winder types, systems, operations and relevant equipment, including:
 - shaft configurations and construction
 - shaft services and installations, including:
 - pipes
 - cables
 - ladders
 - in-shaft communications equipment
 - winding engines
 - bucket/kibbles
 - cage/working platforms

- skips
- power supplies and equipment
- techniques for identifying defects relevant to skip operations, including through inspection and observation
- primary and secondary ventilation/mine ventilation systems relevant to manual winder operations
- techniques for dust suppression and extraction
- principles and techniques for identifying and responding to relevant hazards and emergencies
- site requirements for housekeeping, completing maintenance records and reporting requirements
- techniques for coordinating and communicating job activities with others.

Assessment Conditions

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

- include access to:
 - manual winder
 - personal protective equipment
 - equipment required to operate manual winder
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes 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 regulatory standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/Australian Quality Training Framework 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 the required level of RII training product knowledge
- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence 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 have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must 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.	

*Guidance on simulated environments has been stipulated in the Companion Volume 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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