



Australian Government

RIIUND309D Conduct mechanical underground ground support drilling and installation

Release: 2

RIIUND309D Conduct mechanical underground ground support drilling and installation

Modification History

Release	Comment
1	This unit replaces RIIUND309A Conduct mechanical underground ground support drilling and installation
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to conduct mechanical underground ground support drilling and installation in Metalliferous Mining.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit

Unit Sector

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare to conduct drilling and installation	1.1 Access, interpret and apply drilling and installation documentation and ensure the work activity is compliant 1.2 Obtain, interpret, clarify and confirm work requirements and shift changeover details before proceeding 1.3 Select and wear appropriate personal protective equipment for work activity 1.4 Inspect and assess site conditions to determine scaling requirements, misfires and starting point and take action 1.5 Conduct equipment pre-start and visual checks 1.6 Identify, address and report potential risks, hazards and
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	environmental issues 1.7 Obtain and interpret emergency procedures and be prepared for fire/accident/emergency 1.8 Assess site conditions and review historical information to clarify drilling requirements 1.9 Use approved dust suppression and extraction methods if required
2. Set up and prepare for installation	2.1 Scale loose material and make site safe, where applicable 2.2 Connect auxiliary services where required 2.3 Align equipment to access drill pattern 2.4 Drill holes according to ground support design and work plan 2.5 Erect boundaries to prevent unauthorised access 2.6 Complete all required documentation clearly, concisely and on time
3. Install ground support	3.1 Position and stabilise drill equipment and ensure safety of operating personnel 3.2 Install reinforcements 3.3 Conduct equipment shutdown procedures 3.4 Pass on end of shift information to oncoming shift

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIIUND309A Conduct mechanical underground ground support drilling and installation

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 RIIUND309D Conduct mechanical underground ground support drilling and installation

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies relevant documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of mechanical underground ground support drilling and installation including:
 - setting up, preparing and installing ground support
 - drilling
 - operating hand and power tools
 - identifying hazards
 - monitoring operations
 - reporting defects
- demonstrates completion of mechanical underground ground support drilling and installation that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - completing equipment pre-start, visual checks and shutdown activities
 - scaling loose material
 - drilling holes
 - erecting boundaries
 - positioning and stabilising drill equipment
 - installing reinforcements

Knowledge Evidence

The candidate must demonstrate knowledge in conducting mechanical underground ground support drilling and installation through:

- relevant hand and power tool use
- recording and reporting
- dewatering
- drilling
- equipment safety
- hazardous goods
- inspections
- isolation
- site operations
- ground support characteristics and applications
- stope areas and characteristics

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must 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,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 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.	

*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 frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

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