



Australian Government

DEFEXO149 Prepare explosives for metal hardening

Release: 2

DEFEXO149 Prepare explosives for metal hardening

Modification History

Release 2. Modifications made to Foundation Skills and Assessment Conditions.

Release 1. This unit was released in DEF Defence Training Package release 1.0 and meets the Standards for Training Packages.

This unit supersedes and is equivalent to DEFEO808B Prepare explosives for metal hardening.

- Unit code updated
- Content and formatting updated to comply with the new standards
- All PC transitioned from passive to active voice
- PC 1.1 and 4.1 removed
- Element 1 one new PC
- Element 4 two new PC
- Element 2 three new PC
- All PC reordered

Application

This unit describes the skills required to prepare explosives for metal hardening. Metal hardening using sheet explosives is a specialised application of explosives and is used to harden metals such as rail points.

This unit was developed for personnel who are specialists working within proof and trials organisations, but may be applicable to any individual in this field of work.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work independently or as part of a team under indirect supervision. They would use discretion and judgement, and take responsibility for the quality of their output. They would conduct routine tasks in known contexts.

No licensing, legislative or certification requirements apply to unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Explosive Ordnance

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Identify metal hardening requirements

1.1 Read and clarify metal hardening instructions

1.2 Acquire required resources and check for serviceability

1.3 Identify explosives to meet measured hardening requirements

1.4 Identify and prepare templates used in association with the cutting of the sheet explosives

2 Prepare sheet explosives

2.1 Monitor and adhere to environmental requirements

2.2 Prepare explosives within proof or trial parameters

2.3 Maintain records throughout the process to ensure traceability of preparation activities

2.4 Inspect sheet explosives to ensure serviceability and safety

2.5 Cut and label sheet explosives to the required length and shape

2.6 Prepare sheet explosives for transport to the range

3 Prepare detonators

3.1 Identify detonators

3.2 Check detonators for continuity and repack for transport

4 Finalise activity

4.1 Return to store or dispose of excess explosives

4.2 Make area safe

4.3 Maintain documentation appropriate to the task

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit supersedes and is equivalent to DEFEO808B Prepare explosives for metal hardening.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>

Assessment Requirements for DEFEXO149 Prepare explosives for metal hardening

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and includes:

- analysing and evaluating information
- preparing explosives for metal hardening

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and includes:

- operational knowledge of:
 - explosive ordnance in relation to hardening steel
 - explosive shapes
 - explosives mixture and compounds
 - figure of sensitivity
 - insensitiveness
 - licensing requirements
 - sensitivity of explosives
 - wave shaping

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- acceptable means of simulation assessment
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

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