



Australian Government

DEFEXO125 Determine the properties of explosives

Release: 2

DEFEXO125 Determine the properties of explosives

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 DEFEO607C Determine the properties of explosive ordnance.

- Unit code updated
- Content and formatting updated to comply with the new standards
- All PC transitioned from passive to active voice
- Unit title changed to better reflect unit outcomes
- PC 1.5 removed
- Element 4 one new PC

Application

This unit describes the skills required to determine the properties of explosives through the process of measuring and recording during initiation or firing, in a research environment.

This unit applies to those required to determine the properties of explosives independently or may contribute to the determination of the properties of explosives as a member of a collaborative team.

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 or direct supervision, using discretion and judgement and taking responsibility for the quality of their outputs. They would perform complex tasks in a range of contexts that could be unpredictable.

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

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

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|--|---|
| 1 Plan for explosive testing | 1.1 Identify and confirm type of explosive and required test or analysis |
| | 1.2 Identify nature and type of effects or properties to be determined |
| | 1.3 Investigate and select appropriate methods of measuring and recording the desired effects or properties |
| | 1.4 Investigate and select appropriate firing or initiation techniques and methods |
| | 1.5 Prepare and review the test plan |
| 2 Prepare for explosive testing | 2.1 Test and validate models, simulation and/or prototypes |
| | 2.2 Incorporate modifications or alterations into the testing processes based on validation results |
| | 2.3 Arrange building or purchase of necessary equipment given project constraints and available skills and materials |
| | 2.4 Develop experimental designs in liaison with other staff |
| | 2.5 Assemble, set up and calibrate apparatus |
| | 2.6 Perform routine standardisation procedures prior to the test, and record results |
| 3 Perform explosive test | 3.1 Test instrumentation required for data collection for functionality |
| | 3.2 Prepare and test explosive initiation or firing mechanisms |
| 4 Recover equipment and | 4.1 Recover measurement and recording equipment and |

validate results**extract required data**

- 4.2** Analyse data for anomalies and ‘out of control’ conditions and accept or reject
- 4.3** Assess data for validity against required information, known previous test results and/or relevant reference materials
- 4.4** Record test procedures and, if necessary, recommend modifications to test procedures
- 4.5** Determine properties and or effects from data and measurements collected

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 DEFEO607C Determine the properties of explosive ordnance.

Links

Companion Volume implementation guides are found in VETNet -

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