



Australian Government

Assessment Requirements for DEFEXO085

Apply knowledge of explosive physics

Release: 2

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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 DEFEO002 Apply knowledge of explosive ordnance physics.

- Unit code updated
- Content and formatting updated to comply with the new standards
- All PC transitioned from passive to active voice
- PC 2.1 removed

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:

- adhering to relevant work health and safety requirements and operational safety
- analysing and evaluating information
- applying safety, legislative and statutory requirements relevant to explosive physics
- conducting research
- identifying relevant information
- interpreting organisation role relevant to explosive physics
- using appropriate information technology and software
- writing research reports including recommendations

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:

- comparative measures of an explosive, including:
 - brisance
 - compatibility
 - critical diameter
 - detonation pressure
 - figure of insensitivity

- gas volume
- heat of explosion
- power index
- power of explosive
- rate of burning
- sensitiveness
- sensitivity
- stability
- temperature of explosion
- TNT equivalence
- velocity of detonation
- electro explosive hazards (EEH) protection
- generic design principles to the design and selection of a weapon system, including:
 - aerodynamics
 - ballistics
 - bombs
 - egress systems
 - electronic protection measures
 - fuze systems
 - guidance and seeker systems
 - gun systems
 - hydrodynamics
 - platform integration
 - propulsion systems
 - pyrotechnics
 - warheads

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.

Links

Companion Volume implementation guides are found in VETNet -

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