



Australian Government

DEFWDV029 Employ hand tools in an underwater environment

Release: 1

DEFWDV029 Employ hand tools in an underwater environment

Modification History

Release 1. This is the first release of this unit of competency in the DEF Defence Training Package.

Application

This unit describes the performance outcomes, skills and knowledge required to use hand tools in an underwater environment.

It includes preparing appropriate hand tools for work task and inspecting them for serviceability, prior to, during and post activity, ensuring tools are secured on own body throughout dive, employing tools during work task, recovering waste arising from work task, maintaining and storing tools for ongoing use.

This unit relates, in part, to existing standards in the Australian Diver Accreditation Scheme (ADAS).

This unit applies to persons working as Defence divers but is applicable to all individuals who work in this field.

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, dive plan and procedures must be consulted and adhered to.

Persons undertaking this unit work independently and perform specific tasks in a range of contexts that could be unpredictable.

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

Pre-requisite Unit

Not applicable.

Competency Field

Defence Work Diving.

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.

1 Prepare hand tools	1.1	Determine requirements for hand tools to meet work task and worksite requirements
	1.2	Develop a work plan that is consistent with dive plan
	1.3	Select and inspect hand tools and protective equipment, and report any faults to supervisor
	1.4	Safely secure hand tools for transport to and from dive site
	1.5	Conduct a risk assessment of worksite hazards and take action/s to mitigate identified risks
2 Operate hand tools under water	2.1	Secure hand tools on self during dive for accessibility and lack of interference with mobility and dive equipment
	2.2	Establish a work safe area and confirm location and safety of divers prior to commencing work task
	2.3	Operate hand tools under water safely in accordance with work plan
3 Maintain hand tools	3.1	Minimise environmental impact arising from use of hand tools and recover waste products in accordance with dive plan
	3.2	Undertake post-dive hand tool and protective equipment serviceability checks in accordance with manufacturer specifications and report defects, as required, in accordance with organisational procedures.

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 DEF Defence Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to DEFWDV008 Employ hand tools in an underwater environment.

Links

Companion Volume Implementation Guides are found on VETNet -

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

Assessment Requirements for DEFWDV029 Employ hand tools in an underwater environment

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Performance Evidence

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

- applying relevant industry standards, organisational policies and procedures
- attending to personal and collective safety
- developing a work plan in agreement with dive plan
- employing hand tools underwater in accordance with work plan
- identifying hazards, assessing risks, and selecting and implementing control measures
- inspecting hand tools and protective equipment
- maintaining hand tools
- maintaining records according to organisational policies and procedures
- using not less than four different hand tools in underwater work tasks for a total usage time of not less than 60 minutes across a number of work tasks.

Knowledge Evidence

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

- care of hand tools
- dive physics relevant to tool use and operation, including apparent weight, Newton's law of action and reaction
- diving descent and ascent techniques relevant to carrying of tools
- general diving safety awareness relevant to carrying and operation of tools, including:
 - buoyancy and forces encountered during tool use (Newton's law of action and reaction)
 - hazards and risk controls for tool operation and transport
 - interference with mobility
 - potential damage to diving equipment caused by tools and tool operation
 - working in confined spaces
- identification of tool faults
- organisational policies and procedures
- relevant dive equipment and operational techniques for carrying and use of tools
- relevant industry standards

- use of tools on land and underwater
- workplace hazards and risk mitigation procedures.

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 it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate 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
- applicable documentation, including legislation, regulations, codes of practice, workplace procedures and operation manuals
- documentation specific to the dive operation and task, including dive plan, risk assessment and job safety analysis/job hazard analysis
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry.

Links

Companion Volume Implementation Guides are found on VETNet -

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