



Australian Government

Assessment Requirements for MARA003 Manage loading, discharging and stowing of cargo

Release: 1

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Modification History

Release 1. New unit of competency.

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 include:

- developing effective planning document
- identifying and solving problems related to loading, stowage, security and unloading of cargo
- interpreting stability manual and ensuring stability calculations are within appropriate parameters for proposed cargo operation
- monitoring use of equipment involved in loading, stowage, security and unloading of cargo
- producing reliable documentation
- reading, interpreting and applying instructions, regulations, procedures and information relevant to loading, stowage, security and unloading of cargo.

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 include knowledge of:

- ballast management issues and procedures
- cargo handling documentation requirements
- container position numbering
- design of vessel hold
- effects on cargo handling of sea conditions, wind and weather
- effects of different types of cargo operations on vessel trim and stability
- effects upon stability during loading and discharging operations including heeling moments from gear and loads
- homogenous loading
- main stresses set up by cargo, hogging, sagging and shearing
- methods of;
 - handling various types of cargo
 - caring for various types of cargo
- operational characteristics of different types of shipboard and terminal-based cargo handling equipment and facilities

- principles of cargo care
- procedures for carrying out calculations involving weights, capacities, stowage factors, load densities
- relevant sections of applicable maritime regulations
- relevant work health and safety (WHS)/occupational health and safety (OHS) and cargo handling legislation, codes of practice, policies and procedures
- standard stowage position numbering systems used on container vessels
- static and dynamic loads
- survey and inspection requirements for cargo handling equipment
- types of lashing devices
- typical cargo handling problems and hazards, and appropriate preventative and remedial actions and solutions
- typical types and sizes of shipping containers
- usual methods of packing, loading and discharging, stowage, dunnaging etc.
- use of cargo handling gear including purchases and tackles
- various types of cargo likely to be carried; their peculiar characteristics, liability to damage, decay or deterioration; their measurements; their hazards and problems, and appropriate preventative and remedial action and solutions
- ways of restricting vessel stress levels within permitted levels within permitted limits during loading/discharging cargo.

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

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 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:

- tools, equipment, machinery, materials and personal protective equipment currently used in industry
- applicable documentation such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- range of relevant exercises, case studies and/or simulations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>