



Australian Government

Assessment Requirements for MEM234041 Manage steel supply for major fabrication projects

Release: 1

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Modification History

Release 1. New unit.

Performance Evidence

There must be evidence the candidate has demonstrated the ability to:

- access and interpret design software and plans for steel requirements
- access and interpret scheduling software timing of steel related stages
- plan or review layout of a steel stockyard to take into account:
 - space allocated onsite for steel storage
 - quantities, types, and standard dimensions of steel items specified in designs for each fabrication stage or on site assembled module
 - overall construction schedule and sub-schedules for fabrication stages, sub-assemblies or modules
- prototype steel item storage and supply processes
- schedule release of steel stock items for pre-fabrication processes
- schedule supply of prepared steel stock items for fabrication and assembly taking into account:
 - specified fabrication method
 - specified fabrication processes
 - availability of materials-handling equipment
 - buffer and emergency stock requirements
- liaise with fabrication shop employees to ensure steel stock items' size and availability promote efficient nesting
- vary steel storage and release schedules to take into account design, fabrication and assembly schedule variations
- manage steel stock preparation for use including:
 - rolling of plate for straightening and stress relieving
 - mill scale removal.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- common steel sections, types, grades and standard sizes
- typical software used for large fabrication design and scheduling including access, data entry and data retrieval

- role of prototyping in fabrication projects
- nesting and marking out strategies used during fabrication to achieve efficient use of steel
- advantages and disadvantages of storing steel plate vertically and horizontally
- equipment and methods used for plate straightening and stress relieving
- methods for removal of mill scale including:
 - natural removal by vertical stacking
 - flame treatment
 - shot blasting – needs precise parameters to be used for the blasting chamber to avoid cold hardening.

Assessment Conditions

- Assessors must:
 - have vocational competency in managing steel supply for major fabrication projects at least to the level being assessed with relevant industry knowledge and experience
 - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- There must be suitable access to an operating plant or equipment that allows for appropriate and realistic simulation and documentation including relevant workplace procedures, industry codes and standards.
- 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.

Links

Companion Volume Implementation Guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>