



Australian Government

Assessment Requirements for MEM07033

Operate and monitor basic boiler

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM07033B Operate and monitor basic boiler

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- safely conducting pre-operational checks of the boiler and reporting any faults or hazards
- starting and bringing the boiler online and confirming its operating status
- monitoring the boiler operation and conducting water quality tests, as required
- reacting effectively to any boiler emergency situations
- shutting down the boiler in the required condition, cleaning and putting into storage mode.

Knowledge Evidence

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

- safe work practices and procedures and use of personal protective equipment (PPE)
- pre-operational checks, including:
 - feed water supply
 - boiler water level
 - fuel supply/heat source
 - boiler valves their operation and position
 - combustion air supply
 - combustion equipment
- procedures for identifying and reporting maintenance
- statutory requirements and workplace procedures for identifying and reporting hazards in the work area
- processes for starting a boiler, including:
 - heat input
 - warm up of the reticulation system
 - steam traps and steam line purge
 - systems operation
 - reticulation line pressure

- steam usage
- supply
- processes for confirming operational status of boiler
- procedures for maintaining boiler operating log
- procedures for communicating boiler status and operation
- principles of boiler operation
- boiler fittings
- preparing boiler for inspection
- procedures for monitoring a boiler, including:
 - steam reticulation line pressure
 - usage, supply and quality of steam
 - combustion/heat source system
 - feed water system
 - fuel system combustion air supply
 - water level
 - boiler steam pressures
- operation of boiler control/safety devices
- location of inspection and explosion doors
- procedures for conducting boiler water quality tests
- feed water systems and treatment
- emergency procedures, including:
 - identification of emergency
 - isolation of heat source
 - selection and application of appropriate fire-fighting equipment
 - notification of downstream users
- processes and procedures, including:
 - confirming water level
 - cooling down
 - boiler pressure/vacuum
 - fuel/heat source isolation
 - removal of combustion equipment and water from boiler
 - isolation from any common connection
 - the opening of all access points required for inspection
- procedures for cleaning the boiler internally and externally
- various modes of boiler storage
- procedures for storing the boiler in open or closed condition.

Assessment Conditions

- Assessors must:

- have vocational competency in operating and monitoring a basic boiler 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. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- 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>