



**Australian Government**

**Assessment Requirements for  
MSMBLIC002 Licence to operate an  
advanced boiler**

**Release: 1**

# Assessment Requirements for MSMBLIC002 Licence to operate an advanced boiler

## Modification History

Release 1. Supersedes and is equivalent to MSABLIC002 Licence to operate an advanced boiler

## Performance Evidence

Evidence of competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include demonstration of:

- following work instructions, SOPs and safe work practices
- complying with Commonwealth, state and territory work, health and safety (WHS) legislation and regulations
- complying with Australian and industry standards, organisation workplace standards, policies, relevant codes of practice requirements at all times
- planning and preparing for work, including identifying potential hazards and implementing appropriate risk control measures
- identifying the type of standard or advanced boiler and associated equipment
- reading and interpreting maintenance records, operating logs and safety data sheets (SDS)
- conducting the appropriate pre-start up checks, including identifying all maintenance requirements and visual faults
- using appropriate tools, equipment and PPE in accordance with procedures
- completing all maintenance and rectification requirements in accordance with manufacturers' and workplace procedures, including recording/reporting requirements
- completing the start-up procedures and bringing the boiler online
- monitoring the boiler and associated equipment, including conducting relevant tests and activities and adjusting boiler water quality in accordance with procedures
- interpreting advanced boiler operation tables and figures
- communicating handover of boiler status and associated equipment to appropriate personnel
- demonstrating emergency operating procedures
- identifying all boiler energy sources required to be isolated and made safe for maintenance, inspection and repairs
- applying advanced boiler cleaning and storage techniques.

## Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of PPE
- Commonwealth, state and territory WHS/OHS legislation and approved codes of practice relevant to standard and advanced boiler operation
- Australian and industry standards relevant to standard and advanced boiler operation
- basic principles of heat transfer and thermodynamics in relation to standard and advanced boiler operation
- standard and advanced boiler operation steam equipment operating principles and operating methods
- types and characteristics of multiple fuel systems for standard and advanced boilers
- types and characteristics of feedwater systems and treatment, including de-aerator
- types and use of equipment and fittings for operation and maintenance of boilers
- function, purpose and operation of the following:
  - pre-heater
  - superheater
  - economiser
  - air heater
  - feedwater heater
  - attemperator
  - superheater safety valves
  - economiser relief valves
  - main steam stop valve
- standard and advanced boiler and auxiliary equipment characteristics and capabilities
- essential fittings required where more than one boiler is installed (e.g. battery of boilers)
- processes for confirming operational status of a boiler
- workplace communication techniques and procedures
- responsibilities for checking and testing advanced boilers
- location and inspection procedures and techniques for inspection and explosion doors
- steam and boiler hazards for cold start and handover
- hierarchy of risk control
- type and limitations of corrective action and/or adjustments that can be made in response to routine boiler operation problems and emergencies
- various harmful energy sources in standard and advanced boiler operation and the means to effectively isolate these energy sources and make them safe with particular consideration to advanced boilers
- modes of standard and advanced boiler storage and procedures for storing boiler in open or closed condition
- SDS and safe chemical handling and storage methods for boiler operation and cleaning
- procedures for cleaning boilers internally and externally, where required
- procedures for recording, reporting and maintenance of workplace records and information.

## Assessment Conditions

- Assessments must be conducted by an assessor accredited for this high risk work (HRW) licence class in the Commonwealth/state/territory where the licence will be obtained (i.e. an assessor authorised by a Commonwealth/state/territory WHS/OHS regulator).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and all assessments must be conducted in the English language.
- Where possible, assessment of performance should be undertaken in the workplace and/or under realistic workplace conditions that typically reflect:
  - the use of full-scale equipment
  - performing tasks/activities within timelines that would be expected in a workplace
  - standard and authorised work practices, safety requirements and environmental constraints.
- Where this is not possible or where personal safety, plant operation 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.
- Accredited assessors are responsible for ensuring that candidates have access to all tools, equipment, PPE, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications.
- As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations (RTOs) current at the time of assessment.

## Links

Companion Volume implementation guides are found in VETNet -  
<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>