



Australian Government

Assessment Requirements for PMAOPS313 Operate and troubleshoot furnaces to induce reaction

Release: 1

Assessment Requirements for PMAOPS313 Operate and troubleshoot furnaces to induce reaction

Modification History

Release 1. Unit code and title changed. Application and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMAOPS303 Operate furnaces to induce reaction.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit:

- at least 2 times, each in a separate work context.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- all items on a schematic of the furnace system, including:
 - type of furnace, the component plant items and their functions
 - principles of operation of plant and equipment, including combustion principles, draft, burner design, excess air/flue CO/CO₂, and flame patterns/ impingement
 - methods of changing production rate and process variables
 - impact of external factors (including variations in weather)
 - interactions between plant items and processes
 - operating parameters and integrity limits, and product specifications and tolerances, including temperature, pressure, flow and pH
 - procedures for starting, stopping, operating, controlling and isolating system
- physics and chemistry to the level of being able to provide an overview of the science of the furnace system process
- furnace system abnormal situations and required actions, including but not limited to:
 - soot blowing
 - control of draft, fuel and air
 - variations in catalyst activity (where appropriate)
 - control of temperature and cracking/product rate/quality
 - variations in feed rates
 - variations in quality
- hierarchy of control
- furnace system hazards:
 - possible causes
 - potential consequences

- appropriate risk controls
- reporting and escalation procedures.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
- furnace system
- operating procedures
- abnormal situations must be relevant to furnace systems.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875>