



Australian Government

Assessment Requirements for MEM07044

Test a new aluminium extrusion die

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM07044A Test a new aluminium extrusion die

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
- complying with relevant work health and safety (WHS), regulatory requirements and risk management
- identifying bearings, apertures, and critical measurements and tolerances on die drawing
- supervising and conducting trial extrusions
- using workshop machines and hand tools to finish off a die to design specifications
- identifying cause of extrusion faults from both hollow and solid die extrusions
- identifying appropriate action to take to remedy extrusion faults
- reporting and documenting results.

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)
- aluminium extrusion die construction and the extrusion process
- effects of nitriding and re-nitriding on tool performance
- requirements of AS/NZS 1866:1997 Aluminium and aluminium alloys - Extruded rod, bar, solid and hollow shapes
- techniques for correcting solid and hollow dies
- die support system, including role and types of feeder plates, bakers, bolsters and spacers
- characteristics and use of extruder components, including:
 - container
 - container liner
 - billet
 - die slide
 - pressure rings
 - platen
- characteristics and use of hollow die components, including:

- weld chamber
- mandrel
- die holder
- weld feeds
- bridges
- ports
- die and extruder performance and adjustment records.

Assessment Conditions

- Assessors must:
 - have vocational competency in testing new aluminium extrusion dies 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>