



Australian Government

Assessment Requirements for MEM15007 Conduct product and/or process capability studies

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM15007B Conduct product and/or process capability studies

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
- determining procedure for conducting capability study
- analysing data, identifying solutions and developing recommendations
- estimating the possible number of defects compared to the specification requirements
- preparing reports listing the various options
- determining process design specifications from process capability data
- selecting appropriate sampling plan
- documenting sampling plan and implementation strategy in accordance with SOPs.

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)
- process to be studied
- procedures for conducting process capability studies
- data used to calculate the process capability
- procedures for estimating the possible number of product defects
- options for improving the process and benefits of each
- procedures for determining the optimum target mean
- numerical operations and calculations/formulae for process capability, control limits and other outcomes within the scope of this unit
- procedures for setting control and warning limits
- concept of out-of-control situations
- action to be taken when an out-of-control situation is detected and procedures for documenting out-of-control situations
- acceptable level of quality
- variety of sampling plans and their application

- sampling plan to be applied to a given situation and reasons for selection
- acceptable quality limits
- risks associated with identifying acceptable quality limits for the producer and customer
- procedures for documenting and implementing sampling plans.

Assessment Conditions

- Assessors must:
 - have vocational competency in conducting product and/or process capability studies 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>