



**Australian Government**

# **Assessment Requirements for MEM07022 Program CNC wire cut machines**

**Release: 2**

# Assessment Requirements for MEM07022 Program CNC wire cut machines

## Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM07022 Program CNC wire cut machines (Release 1).

Release 1. Supersedes and is equivalent to MEM07022C Program CNC wire cut machines.

## 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
- identifying and interpreting specifications, charts, lists, drawings and other applicable reference documents in programming computer numerically controlled (CNC) wire cutting machines
- calculating coordinates of all relevant points on the part or product to be produced
- writing a CNC wire cut program tool path using advanced operations, canned cycles and sub-routines
- storing the program and producing an operations sheet in accordance with SOPs for the programs use
- downloading program and setting parameters
- loading, aligning and operating machine to test the program
- checking components or products for conformance to specifications.

## 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)
- operations to be controlled by the program to be written
- tool path(s) to be followed when producing the part or product and the sequence of operations to be programmed with reasons for selecting the chosen tool path(s) and sequence of operations
- techniques for determining the zero point of a wire cut machine
- canned cycles and sub-routines accessible in the particular CNC wire cut machine and the application of each canned cycle and sub-routine available
- canned cycles and/or sub-routines to be used in the CNC wire cut program and reasons for selecting the chosen canned cycles and/or sub-routines
- standard codes used in the writing of CNC wire cut programs and their application

- procedures for writing and storing CNC wire cut programs in standard code format
- procedures for completing CNC wire cut operation sheets and the information to be included
- procedures for downloading and verifying CNC wire cut programs
- machining parameters that may be entered into the machine controller and the effect of varying the machining parameters on the product or part produced
- work holding fixtures/devices/tools and procedures for mounting work holding fixtures/devices tools
- location of the required work holding fixtures/devices/tools relative to the machine datum or zero
- purpose of datum setting
- pre-start checks and the purpose and function of safety features and equipment of the CNC wire cut machine
- machine mode appropriate to the testing and proving of the CNC wire cut program and the checking of the position of the work piece and procedures to be followed when using the machine in this mode
- relative position of the work piece to the machine datum or zero
- specifications of the part or product and measuring equipment/techniques to be used to check for conformance to specification.

## Assessment Conditions

- Assessors must:
  - have vocational competency in programming CNC wire cutting machines 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.
- Assessment must occur in a functioning workplace. Where assessment in the workplace would be unsafe, impractical or threatens the environment, assessment must occur in a sufficiently rigorous simulated environment that reflects the circumstances that would be experienced in a functioning workplace. Assessment must cover all aspects of workplace performance, including 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>

