



Australian Government

CPCSHP3001 Fabricate shopfitting components using CNC machines

Release: 2

CPCSH3001 Fabricate shopfitting components using CNC machines

Modification History

Release 2 Updated reference to general construction induction training program.

Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.

Supersedes and is equivalent to CPCCSH3001 Fabricate shopfitting components using CNC machines. Updated to meet the Standards for Training Packages 2012.

Application

This unit of competency specifies the skills and knowledge required to program and use computer numerically-controlled (CNC) machines to fabricate components for shopfitting units. It includes inputting correct data into selected software programs and sequencing the fabrication process.

It applies to those who fabricate components for a range of shopfitting units in an off-site manufacturing premises ready for installation on commercial sites.

Individuals at this level take responsibility for organising and completing these tasks with a high degree of self-direction.

No licensing, legislative or certification requirements apply to this unit of competency at the time of publication.

Completion of the general construction induction training program, specified in the Safe Work Australia model *Code of Practice: Construction Work*, is required by anyone carrying out construction work. Achievement of *CPCWHS1001 Prepare to work safely in the construction industry* meets this requirement.

Pre-requisite Unit

Nil.

Unit Sector

Shopfitting

Elements and Performance Criteria

Elements describe the Performance criteria describe what needs to be done to

essential outcomes.

demonstrate achievement of the element.

1 Plan and prepare to use CNC machines.

- 1.1 Identify, read and interpret details of shopfitting components from job requirements, plans and specifications.
- 1.2 Produce a full size set out of all shopfitting components and detail fabrication method, joint type, grain direction, and drawer and door clearance.
- 1.3 Calculate material quantities for fabrication of shopfitting components from dimensions on plans.
- 1.4 Develop an efficient cutting list to minimise waste.
- 1.5 Determine job priorities and sequence job tasks in consultation with others in the workplace.
- 1.6 Identify workplace hazards and conditions, assess risks and implement risk controls following work health and safety requirements and environmental practices.
- 1.7 Select, fit and used personal protective equipment (PPE) required for the task.
- 1.8 Obtain, safely handle and prepare materials appropriate to the work application and locate ready for use.
- 1.9 Check serviceability of CNC machinery, and identify, report and rectify faults.

2 Prepare CNC program.

- 2.1 Select appropriate CNC machine and software program for the task.
- 2.2 Define the machine functions and select the appropriate program commands for the machine control system in preparation to perform and save programming operations for the fabrication process.
- 2.3 Determine and check that programming terms, methods and data storage capacity are consistent with job requirements and machine specifications.
- 2.4 Identify and select method of transferring programs into machine memory.
- 2.5 Edit machine specification program, compensating for tool profiles, to produce the required straight and circular

tool movements.

- | | | | |
|---|-------------------------------------|-----|--|
| 3 | Transfer and test machine controls. | 3.1 | Load appropriate program into machine memory using selected method. |
| | | 3.2 | Enter program following machine specifications to fabricate shopfitting components. |
| | | 3.3 | Conduct a dry run simulation to test program operations. |
| | | 3.4 | Recognise minor faults and problems with CNC machine operation, and select and apply appropriate action to overcome issues and meet project schedules. |
| | | 3.5 | Edit program and alarm settings as required using the control station. |
| | | | |
| 4 | Fabricate components. | 4.1 | Follow manufacturer specifications to fabricate components using automatic mode. |
| | | 4.2 | Identify and legibly mark face and edge of each component following design specifications to assist with efficient and accurate assembly. |
| | | 4.3 | Locate and arrange components ready for assembly to align with relevant plans and specifications. |
| | | 4.4 | Store plans, specifications and set-outs for future reference. |
| | | | |
| 5 | Clean up. | 5.1 | Clean CNC machinery, tools and equipment, check for serviceability and report damage or faults. |
| | | 5.2 | Clear work area and dispose of, reuse or recycle materials following workplace and environmental requirements. |
| | | 5.3 | Store and secure tools and equipment following workplace procedures. |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to CPCCSH3001 Fabricate shopfitting components using CNC machines.

Links

Companion volumes to this training package are available at the VETNet website -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>