



Australian Government

FWPTMM4203 Install and commission CNC software

Release: 1

FWPTMM4203 Install and commission CNC software

Modification History

Release	Comment
1	Replaces equivalent unit FPITMM4203B Install and commission CNC software, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format.

Application

This unit of competency describes the outcomes required to install and commission computer numerically controlled (CNC) processes and machine control programs for CNC sizing machines and CNC machining and processing centres. Work is completed in a forest and wood products factory setting

The unit applies to managers or supervisors of timber manufacturing facilities who update machinery and commission new equipment in response to technological improvements and new operational imperatives.

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

Pre-requisite Unit

Nil

Unit Sector

Timber Manufactured Products

Timber Merchandising

Elements and Performance Criteria

<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Prepare for software installation	1.1 Diagnose program format and operational purpose and identify specified applications.

	1.2 Check specifications for intended operating conditions. 1.3 Check program instructions for compliance with specifications. 1.4 Counter set software timers to specification.
2. Install automatic process machine control programs	2.1 Select appropriate program loading technique. 2.2 Connect external loading devices correctly to automatic process machine control system. 2.3 Place machine control system in correct operational mode to accept program loading. 2.4 Download program in line with manufacturer's recommended procedure. 2.5 Check during and after downloading to ensure accurate and complete data transfer. 2.6 Disconnect external program loading devices and connections from process and machine control system.
3. Commission automatic process and machine control program	3.1 Monitor operation of equipment using the program for accuracy and safe performance. 3.2 Measure and check outputs for compliance with specifications. 3.3 Check external inputs for compliance with specifications. 3.4 Check total operation for compliance with specifications and resolve any issues. 3.5 Identify location for storage of program master copy and store accordingly. 3.6 Record installation and commissioning process and problems and report to appropriate personnel.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Numeracy skills to:	interpret sizing specifications for machines and monitor the operation of commissioned machines to ensure accurate calibration.
Reading skills to:	interpret detailed and sometimes unfamiliar instructions for installing CNC software and commissioning machinery.

Writing skills to:	complete detailed and accurate reports on installation and commissioning processes and problems.
Planning and organising skills to:	efficiently and logically manage operational logistics for installing software and commissioning machinery.
Problem-solving skills to:	monitor machinery for compliance with calibration specifications and resolve any issues.
Technology skills to:	use computerised operating controls for CNC machines to monitor accurate and safe performance.

Range of Conditions

Not Applicable

Unit Mapping Information

FPITMM4203B Install and commission CNC software

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPTMM4203 Install and commission CNC software

Modification History

Release	Comment
1	Replaces equivalent unit FPITMM4203B Install and commission CNC software, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- install and commission computer numerically controlled (CNC) software in CNC sizing machines and/or CNC machining and processing centres
- check that machine is operating safely and in line with its intended purpose and program
- complete a detailed and accurate report, for each installation, on the installation and commissioning process and problems encountered.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- for the CNC software:
- program format and operational purpose
- system functions and capabilities
- methods to install
- methods to commission machinery to operational specification
- requirements for safe storage of program master copy
- for the machine being commissioned:
- operational purpose and sizing specifications
- methods to monitor the operation of commissioned machines and check calibration

- organisational procedures for recording and reporting on installation and commissioning processes and problems.

Assessment Conditions

The following resources must be made available:

- CNC sizing machines and CNC machining and processing centres
- CNC software programs
- machine sizing specifications
- instructions for installing CNC software and commissioning machinery
- template reports for installation and commissioning processes and problems
- relevant personnel for the purposes of communicating information
- organisational procedures for installing software and commissioning machinery

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>