



Australian Government

FWPCOT3213 Manufacture cutting tools

Release: 1

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Modification History

Release	Comment
1	Replaces equivalent unit FPICOT3213B Manufacture cutting tools, 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 manufacture cutting tools by selecting appropriate material and machining blanks to specified profiles. Work is completed in a wood products factory setting.

The unit applies to Sawdoctor, Saw Repairer.

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

Pre-requisite Unit

Nil

Unit Sector

Common Technical; applies across sectors

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. Select required material	1.1 Review work order and where required check with appropriate personnel. 1.2 Obtain information about timber and equipment and review to determine preferred material type and cutting tool dimensions. 1.3 Select appropriate personal protective equipment and check for operational effectiveness. 1.4 Select material and cut to suitable lengths for machining cutting tool

	blank. 1.5 Plan processes to produce blank in line with work order.
2. Machine blank	2.1 Use equipment in line with organisational safety procedures, manufacturer's instructions and environmental protection practices. 2.2 Determine blank dimensions and tolerances in line with work order. 2.3 Set up machining equipment in line with manufacturer's recommendations and industry practices. 2.4 Machine blank to required dimensions and tolerances using selected processes. 2.5 Check blank surface finish and dimensions against specifications.
3. Machine required profiles	3.1 Position blank in suitable attachments to machine tooth profiles. 3.2 Complete set-up and machine blanks to ensure each tooth profile and dimension meets required tolerances. 3.3 Check profile surface finish and dimensions against specifications. 3.4 Dispose of sub-standard profiled material in line with environmental protection practices. 3.5 Record and report processing problems and equipment faults 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:	complete precise calculations to machine and profile cutting tools to specified diameters, profiles, widths, lengths and angles within tolerances.
Oral communication skills to:	ask open and closed probe questions and actively listen to clarify contents of work orders.
Reading skills to:	- interpret: - workplace health and safety and other organisational procedures - work orders - manufacturers' instructions and maintenance recommendations.
Writing skills to:	complete basic accurate records for processing problems and equipment faults.

Planning and organising skills to:	efficiently and logically sequence the stages of preparation and profiling activities using work order to guide activities.
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Range of Conditions

Not Applicable

Unit Mapping Information

FPICOT3213B Manufacture cutting tools

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 FWPCOT3213 Manufacture cutting tools

Modification History

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1	Replaces equivalent unit FPICOT3213B Manufacture cutting tools, 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:
- follow organizational policies and procedures relevant to manufacturing cutting tools
- safely manufacture cutting tools that meet industry standards and technical requirements

Knowledge Evidence

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

- purpose, features and operation of tools and equipment used to machine and profile blanks for cutting tools
- importance of profiling cutting tools to match requirements for:
 - characteristics of various materials sawn
 - speed of the cutting process
 - direction of the cutting process
 - cutting angle
 - cutting tool specifications
- methods for:
 - calculating cutting tool dimensions
 - machining and profiling blanks to required profile

- assessing surface finish and measuring dimensions of finished tool against specifications and tolerances
- industry standard and organisational tolerances
- organisational procedures specific to manufacturing cutting tools:
 - workplace health and safety with particular emphasis on equipment lock out and use of personal protective equipment
 - communication reporting lines
 - recording and reporting processing problems and equipment faults
- environmental protection practices for machining tools and equipment in forest products factory settings:
 - reducing water and energy use
 - cleaning plant, tools and equipment
 - disposing of, recycling and reusing materials

Assessment Conditions

The following resources must be made available:

- tools and equipment used to machine and profile blanks for cutting tools
- measuring equipment which includes one or more of the following:
 - vernier callipers
 - micrometers
 - rules
- blank stock for cutting tools
- personal protective equipment suitable for manufacturing cutting tools
- manufacturers' instructions for use, repair and maintenance of equipment
- work order for machining activities with specific instructions for manufacturing cutting tools for specified equipment
- template documents for recording processing problems and equipment faults
- organisational policies and procedures for manufacturing cutting tools.

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.

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