



Australian Government

FWPCOT3287 Operate CNC equipment for grinding, tensioning and levelling saw blades

Release: 1

FWPCOT3287 Operate CNC equipment for grinding, tensioning and levelling saw blades

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 5.0.

Application

This unit of competency describes the skills and knowledge required to set up and operate computer numerical control (CNC) equipment for grinding, tensioning and levelling saw blades.

The unit applies to individuals who operate CNC equipment for grinding, levelling and tensioning saw blades in a saw technician workshop or sawmill for sawmilling operations.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Common Technical (COT)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Review work order to determine job requirements and, where required, seek clarification from appropriate personnel 1.2 Review workplace health and safety requirements, including the use of personal protective equipment, equipment lock-out and safe

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	manual handling techniques 1.3 Identify, assess and take actions to mitigate risks and hazards associated with operating CNC equipment 1.4 Identify and implement workplace procedures for minimising waste material and maximising energy efficiency 1.5 Obtain tools, equipment and measuring devices needed for the work according to established procedures, and check for correct operation and safety 1.6 Select and inspect saw blades and determine suitability for machining
2. Set up CNC equipment	2.1 Set CNC program to job requirements 2.2 Check safety equipment, including emergency stops, gauges, guards and controls 2.3 Set and adjust equipment according to job requirements and manufacturer instructions 2.4 Check CNC equipment, cutting tools and jigs for safe and effective operation 2.5 Conduct trial runs to check equipment operation, test and prove CNC program and assess quality of finished work 2.6 Make final adjustments to CNC programs and equipment according to workplace procedures
3. Operate CNC equipment	3.1 Operate and monitor equipment to ensure product quality and output 3.2 Identify and report problems with the required work to appropriate personnel 3.3 Reuse, recycle or dispose of items that do not meet quality requirements 3.4 Comply with any authorised changes in working procedures
4. Finalise operation and maintain equipment	4.1 Clean work area and leave in a safe condition according to workplace procedures 4.2 Perform routine maintenance according to workplace and manufacturer instructions 4.3 Tag and report faulty and/or defective equipment 4.4 Collect and store unused hardware according to workplace

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	procedures 4.5 Dispose of waste and scrap materials according to workplace procedures 4.6 Check and replenish consumables 4.7 Record and report production outcomes, equipment faults and maintenance requirements to appropriate personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Extracts essential information from operational manuals to determine software parameters of CNC equipment
Writing	Prepares routine written reports using the required format, language and structure
Oral communication	Employs active listening and questioning to clarify content of work orders
Numeracy	- Uses standard measures to record calibration outcomes - Interprets graphical and statistical data used in calibration process
Navigate the world of work	Understands main tasks, responsibilities and boundaries of own role
Interact with others	Uses modes of communication suitable to purpose to confirm and clarify understanding
Get the work done	Recognises and responds to routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

FWPCOT3287 Operate CNC equipment for grinding, tensioning and levelling saw blades	Not applicable	New unit	No equivalent unit
--	----------------	----------	--------------------

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPCOT3287 Operate CNC equipment for grinding, tensioning and levelling saw blades

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 5.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- operated computer numerical control (CNC) equipment to grind, tension and level saw blades.

In doing the above job, the individual has:

- followed work order and relevant workplace health and safety and environmental protection procedures
- identified, assessed and taken actions to mitigate risks and hazards associated with operating CNC equipment
- set, adjusted and tested CNC equipment
- performed routine maintenance of CNC equipment
- recorded and reported production outcomes, equipment faults and maintenance requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- types, components, uses and limitations of CNC equipment used for grinding, tensioning and levelling saw blades
- reasons for using CNC equipment
- elements of a basic CNC program
- function of elements in controlling the operation of a CNC machine
- machining operations
- methods for setting CNC program
- workflow processes
- reasons for testing and proving the CNC program

- procedures for editing the CNC program via the machine controller
- effects of editing on the operation of the CNC equipment and the part or product to be produced
- measuring equipment/techniques used to check for conformance to specification
- types of risk and hazards and mitigation measures associated with CNC machines
- maintenance and housekeeping requirements of CNC machines
- safe work practices and procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a saw technician workshop or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - CNC equipment for grinding, tensioning and levelling saw blades
 - hand tools, equipment and measuring devices required for use when using CNC equipment for grinding, tensioning and levelling saw blades
 - saw blades
 - personal protective equipment (PPE) for operating CNC equipment
- specifications:
 - template documents for recording production outcomes
 - manufacturer instructions for CNC equipment
 - work order with specific instructions for grinding, tensioning and levelling saw blades
 - workplace procedures for using CNC equipment to grind, tension and level saw blades.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>