



Australian Government

FWPSAW3221 Profile saw blanks

Release: 2

FWPSAW3221 Profile saw blanks

Modification History

Release	Comments
Release 2	This version released with FWP Forest and Wood Products Training Package Version 3.0.
Release 1	This version released with FWP Forest and Wood Products Training Package Version 2.0.

Application

This unit of competency describes the outcomes required to calculate blade lengths, and to produce tooth profiles to work orders and specifications. Work is completed in a forest 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

Sawmilling and Processing

Elements and Performance Criteria

Element	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 profiling	1.1 Review work order and where required check with appropriate personnel. 1.2 Calculate numbers of band, wide band and gang saw blades to be profiled. 1.3 Select appropriate profiling and personal protective equipment and check for operational effectiveness in line with manufacturer's

	recommendations. 1.4 Plan profiling process in line with work order.
2. Profile blanks	2.1 Follow organisational safety procedures throughout all machining processes. 2.2 Calculate key saw blade dimensions. 2.3 Obtain calculated blank length or cut from ribbon stock. 2.4 Set up press with punches to suit saw dimensions. 2.5 Punch first tooth in blank to align other teeth. 2.6 Punch remaining teeth to required pitch and tooth profile. 2.7 Assess performance of profiling equipment. 2.8 Dispose of irreparable saw blanks in line with environmental protection practices. 2.9 Identify routine processing and equipment faults and resolve or 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:	- complete precise calculations to profile blade saws to correct: - width - length - pitch - gullet depth - hook and back clearance angles.
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 procedures - work orders - manufacturers' maintenance recommendations.
Writing skills to:	complete accurate basic records for processing 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.

Problem-solving skills to:	• identify and dispose of irreparable saw blanks • recognise faulty equipment and resolve by reporting or rectifying.
Technology skills to:	• select and use appropriate profiling and personal protective equipment • efficiently and safely profile saw blades.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSAW3221 Profile saw blanks Release 2	FWPSAW3221 Profile saw blanks Release 1	Minor typographical errors corrected.	Equivalent unit

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 FWPSAW3221 Profile saw blanks

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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 organisational policies and procedures relevant to profiling saw blanks
- profile saw blanks in line with the work order and within prescribed organisational requirements
- operate profiling equipment
- set up punch and die kits or other equipment used for profiling saw teeth
- calculate these key dimensions for blades in line with manufacturers' specifications and timber processing requirements:
 - width
 - length
 - pitch
 - gullet depth
 - hook and back clearance angles
 - number of teeth
- assess the performance of profiling equipment and complete basic written records for:
 - edge finish
 - wear rates
 - production rates
 - distortion.

Knowledge Evidence

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

- purpose, features and operation of band, wide band and gang saws for which saw blanks are profiled
- features and names of different parts of band saw blades
- purpose, features and operation of tools and equipment used to profile saw blanks:
 - power fly presses
 - punch systems
- importance of profiling saw blanks to match requirements for:
 - characteristics of various materials sawn
 - speed of the sawing process
 - direction of the sawing process
 - cutting angle for sawing
 - saw blade specifications
- methods for:
 - calculating key saw dimensions
 - profiling, pressing and punching saw blanks to required pitch and tooth profile
 - aligning saw teeth
 - assessing performance of profiling equipment for:
- edge finish
- wear rates
- production rates
- distortion
- organisational policies and procedures specific to profiling saw blanks:
 - workplace health and safety with particular emphasis on equipment lock out and use of personal protective equipment
 - communication reporting lines
 - recording and reporting processing and equipment faults.
- environmental protection practices for repairing and maintaining 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:

- one or more of the following types of tools and equipment used to profile saw blanks:
 - power fly presses
 - punch systems
- ribbon stock for large heavy duty band, wide band and gang saw blades
- personal protective equipment suitable for profiling saw blanks
- manufacturers' instructions for use, repair and maintenance of equipment

- work order for repair and maintenance activities with specific instructions for profiling saw blanks for specified equipment
- documents, spreadsheets and commonly used proformas for recording processing and equipment faults
- relevant personnel for the purposes of communicating information
- organisational policies and procedures for profiling saw blanks.

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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