



Australian Government

FWPSAW3217 Hard face saw teeth

Release: 2

FWPSAW3217 Hard face saw teeth

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 set the hard face machine and hard face the teeth of band, circular and gang saw blades. 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 to hard face saw teeth	1.1 Review work order and where required check with appropriate personnel. 1.2 Select appropriate maintenance and personal protective equipment and check for operational effectiveness in line with manufacturer's recommendations.

	1.3 Plan hard facing process in line with work order.
2. Hard face saw teeth	2.1 Follow organisational safety procedures throughout all machining processes. 2.2 Select material stock and set up in machine following manufacturer's recommendations. 2.3 Make adjustments to machine variables to suit saw and material. 2.4 Align individual teeth to machine tip to ensure hard facing is applied to cutting surfaces. 2.5 Operate and adjust machine for variables to ensure material cohesion. 2.6 Check completed facing against specifications. 2.7 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:	identify and adjust machine settings for correct temperature, pressure and weld time.
Oral communication skills to:	ask open and closed probe questions and actively listen to clarify contents of work orders.
Reading skills to:	- interpret documents: - workplace health and safety procedures - work orders - manufacturers' instructions and maintenance recommendations.
Writing skills to:	complete basic accurate records of processing and equipment faults.
Planning and organising skills to:	efficiently and logically sequence stages of preparation and repair work using work order to guide activities.
Problem-solving skills to:	recognise faulty equipment and resolve by reporting or rectifying.
Technology skills to:	- select and use appropriate repair, maintenance and personal protective equipment to hard face saw teeth - efficiently and safely hard face saw teeth.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSAW3217 Hard face saw teeth Release 2	FWPSAW3217 Hard face saw teeth 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 FWPSAW3217 Hard face saw teeth

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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 hardfacing saw teeth
- hard face saw teeth in line with the work order and within prescribed organisational requirements
- remove and replace saw from equipment.

Knowledge Evidence

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

- purpose, features and operation of saws for which teeth blades are hard faced:
 - band saws
 - circular saws
 - gang saws
- features and names of different parts of saw blades
- purpose, features and operation of tools and equipment used to hard face saw teeth:
 - resistance welding equipment
 - plasma transfer equipment
- methods for:
 - assessing saw blade condition
 - cohering the face to the existing face of saw blade teeth
 - assessing completed facings against specifications
- tooth pitch and tooth angles at which blades are sharpened (blade geometry)
- variable settings for machine operations and effects on material cohesion:

- pressure
- temperature
- current
- voltage
- weld time
- vacuum
- organisational policies and procedures specific to hard facing saw teeth:
 - 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:

- tools and equipment used to hard face saw teeth:
 - resistance welding equipment
 - plasma transfer equipment
- blade saws to be hard faced from these types of saws:
 - band saws
 - circular saws
 - gang saws
- hard compound metal used to hard face saw teeth
- personal protective equipment suitable for hard facing saw teeth
- manufacturers' instructions for use, repair and maintenance of equipment
- work order for repair and maintenance activities with specific instructions for hard facing saw teeth in 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 hard facing saw teeth.

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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