



Australian Government

Department of Education, Employment and Workplace Relations

FPISAW3217B Hard face saw teeth

Release: 1

FPISAW3217B Hard face saw teeth

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to set the hard face machine and hard face the teeth of a saw

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPISAW3217A Hard face saw teeth

Application of the Unit

Application of the unit

The unit involves hard facing saw teeth in a forest products factory setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to hard face saw teeth	1.1. Applicable Occupational Health and Safety (OHS), environmental, legislative and organisational requirements relevant to hard facing saw teeth are identified and followed 1.2. Work order is reviewed and checked with appropriate personnel 1.3. Equipment is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations 1.4. Hard facing process is planned in line with site procedures and environmental requirements 1.5. Communication with others is established and maintained in line with OHS requirements
2. Hard face saw teeth	2.1. Material stock to be used for hard facing is selected and set up in the machine following manufacturer's recommendations 2.2. Saw is set up in machine and adjustments made to machine variables to suit saw and material in line with manufacturer's recommendations 2.3. Individual teeth are aligned to machine tip to ensure hard facing is applied to cutting surfaces 2.4. Machine is operated and adjusted for variables to ensure material cohesion 2.5. Completed facing is checked against specifications 2.6. Hard facing process and equipment faults are investigated, recorded and reported in line with site requirements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit

Required skills

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment; efficiently and safely hard face saw teeth
- Communication skills and interpersonal techniques sufficient to interact

REQUIRED SKILLS AND KNOWLEDGE

appropriately with colleagues and others in the workplace

- Literacy skills sufficient to accurately record and report workplace information, and maintain documentation
- Numeracy skills sufficient to estimate, measure and calculate time required to complete a task
- Problem solving skills sufficient to identify problems and equipment faults and demonstrate appropriate response procedures

Required knowledge

- Applicable Commonwealth, State or Territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for hard facing saw teeth
- Environmental protection requirements, including the safe disposal of waste material, minimising carbon emissions and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for hard facing saw teeth
- Environmental risks and hazards
- Characteristics of metal and saws
- Hard facing methods
- Saw condition assessment
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their safe use, operation and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently hard face saw teeth within organisational requirements

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to hard facing saw teeth
- following organisational policies and procedures relevant to hard facing saw teeth
- hard facing saw teeth in line with the work order and within prescribed organisational requirements
- removing and replacing saws from equipment

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge

EVIDENCE GUIDE

- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

OHS requirements:

are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing

RANGE STATEMENT

- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- machine isolation and guarding
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements
may include:

Legislative requirements:

are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements
may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards
- recording and reporting requirements
- equipment use and maintenance and storage

RANGE STATEMENT

requirements

- environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)

Hard facing

is the process of cohering a hard metal substance (the face) to the existing face of saw blade teeth

Saws may include:

- band saws
- circular saws (all types)
- gang saws

and is to include:

- procedures for equipment lock-out, ie protecting operators and co-workers from accidental injury by isolating the machine from the power source

Work order is to include:

- instructions for the hard facing of saw teeth in designated equipment

and may also include:

- instructions for the environmental monitoring of work and procedures
- environmental care requirements relevant to the work

Appropriate personnel may include:

- supervisors
- suppliers
- clients
- colleagues
- managers

Equipment may include:

- resistance welding equipment
- plasma transfer equipment

Communication may include:

- verbal and non-verbal language
- constructive feedback
- active listening
- questioning to clarify and confirm understanding
- use of positive, confident and cooperative language
- use of language and concepts appropriate to individual social and cultural differences
- control of tone of voice
- body language

RANGE STATEMENT

Material stock is to include:

- hard compound metal used to hard face saw teeth

Variables may include:

- pressure
- temperature
- current
- voltage
- weld time
- vacuum

Records and reports may include:

- saw teeth hard facing outcomes
- inspection
- storage locations
- quality outcomes
- hazards
- incidents
- equipment malfunctions

and may be:

- manual
- using a computer-based system or other appropriate organisational communication system

Unit Sector(s)

Unit sector

No sector assigned

Co-requisite units

Co-requisite units

Competency field

Competency field Sawmilling and Processing