



Australian Government

Department of Education, Employment and Workplace Relations

FPICOT3201B Hand sharpen knives and blades

Release: 1

FPICOT3201B Hand sharpen knives and blades

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to hand sharpen knives and blades for a variety of machines

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 FPICOT3201A Hand sharpen knives and blades

Application of the Unit

Application of the unit

The unit involves hand sharpening knives and blades in a forest products factory

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

Not Applicable

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 for sharpening	1.1. Applicable <i>occupational health and safety</i> (OHS), <i>environmental</i> , <i>legislative</i> and <i>organisational requirements</i> relevant to hand sharpening knives and blades are identified and followed 1.2. <i>Work order</i> is reviewed and clarified with <i>appropriate personnel</i> 1.3. Types of <i>knives and blades</i> to be <i>sharpened</i> are removed from designated machinery 1.4. <i>Equipment</i> is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer recommendations 1.5. Sharpening process is planned in line with site procedures and environmental requirements 1.6. <i>Communication</i> with others is established and maintained in line with OHS requirements
2. Assess condition and set up knives and assemblies	2.1. <i>Cutting performance</i> of knife is assessed for sharpening requirements 2.2. <i>Knife holders</i> are cleaned to enterprise standards 2.3. Knife holder is assessed for condition and defects are corrected 2.4. Jig setting is selected for knife assembly 2.5. Knife assembly is separated and reassembled in line with manufacturer recommendations
3. Sharpen knives and blades	3.1. <i>Pre-startup checks</i> are carried out on equipment in line with site requirements 3.2. Knives or blades are cleaned of excess build-up and inspected for <i>defects</i> , with those unable to be repaired by sharpening replaced and <i>dealt with</i> in line with site procedures, manufacturer recommendations and environmental requirements 3.3. <i>Geometry</i> for knives or blades is selected from manufacturer's instructions 3.4. <i>Manual sharpening equipment</i> is selected with suitable <i>attachment</i> for holding the knife or blade 3.5. Sharpening equipment is fed across and into cutting edge to obtain clean cutting edge to conform to geometric requirements without defects and burns 3.6. Blade or knife is inspected after sharpening for accuracy, and remaining <i>burrs</i> are <i>honed</i> to obtain a

ELEMENT**PERFORMANCE CRITERIA**

sharp cutting edge

3.7. Sharpening and equipment faults are *recorded and reported* to the appropriate personnel

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; carry out pre-startup checks; efficiently and safely hand sharpen knives and blades
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others
- Literacy skills sufficient to follow legislation, regulations, standards, codes of practice and established safe practices and procedures for hand sharpening knives and blades; record and report workplace information; maintain documentation
- Numeracy skills sufficient to measure, estimate and calculate time required to complete a task
- Problem solving skills sufficient to identify problems and equipment faults; 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 hand sharpening knives and blades
- Environmental protection requirements, including the safe disposal of waste material, the cleaning of plant, tools and equipment, and the minimisation of carbon emissions
- Organisational and site standards, requirements, policies and procedures for hand sharpening knives and blades
- Environmental risks and hazards
- Characteristics of metal, knives and blades
- Sharpening methods and geometry
- Manual sharpening equipment
- 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 and maintenance

REQUIRED SKILLS AND KNOWLEDGE

- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace records and 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 hand sharpen knives and blades in line with 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 hand sharpening knives and blades
- following organisational policies and procedures relevant to hand sharpening knives and blades
- hand sharpening knives and blades in line with the work order and prescribed organisational requirements
- removing and replacing knives and blades 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 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

EVIDENCE GUIDE

accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge

- 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. **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

RANGE STATEMENT

organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- 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
- 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

RANGE STATEMENT

- ethical standards
 - recording and reporting requirements
 - equipment use, maintenance and storage requirements
 - environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
- Work order** is to include:
- instructions for the hand sharpening of knives and blades 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
- Knives and blades** may include:
- saw blades
 - planer blades
 - thicknesser blades
 - spindle moulder knives
 - all other production equipment with knives or blades
- Sharpening** is to include:
- pitch
 - depth of cut
 - speed the knife or blade is sharpened at to obtain a sharp edge
- Equipment** is to include:
- procedures for equipment lock-out, such as protecting operators and co-workers from accidental injury by isolating the machine from the power source
- and may include:
- manual sharpening equipment
- Communication** may include:
- verbal and non-verbal language
 - constructive feedback
 - active listening
 - questioning to clarify and confirm understanding

RANGE STATEMENT

- use of positive, confident and cooperative language
- use of language and concepts appropriate to individual social and cultural differences
- control of tone of voice

Cutting performance

is how sharp the knife or blade is relevant to the material being cut

Knife holders

are the assemblies that house the knives in a cutting head or similar device

Pre-startup checks

are conducted to ensure:

- machine has been set up correctly
- systems are performing accurately
- machine is operating to optimum performance

Defects may include cutting edges with:

- burrs
- burns
- chips
- splits
- dents

Dealing with may include:

- recycling knives or blades unable to be repaired by sharpening
- sending knives or blades unable to be repaired by sharpening to landfill

Geometry

is the pitch and angle that a knife or blade is sharpened at, allowing for the device that the knife or blade is in and the material it will be cutting

Manual sharpening equipment may include:

- files (round, triangular, square and flat)
- honing tools
- saw sets

Attachments may include:

- blade holders with or without clamps
- saw vices

Burrs

are fine raised flaps of metal curling backwards as a result of the sharpening process

Honing:

- involves using a flat emery stone to remove burrs and to achieve a crisp sharp cutting edge

Records and reports may include:

- knife or blade type and size
- inspection and work outcomes
- storage locations

RANGE STATEMENT

- quality outcomes
- hazards
- incidents
- equipment malfunctions

and may be:

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

Unit Sector(s)

Not Applicable

Competency field

Competency field Common Technical