



Australian Government

Department of Education, Employment and Workplace Relations

FPICOT3206B Cut material using high speed optimiser

Release: 1

FPICOT3206B Cut material using high speed optimiser

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to prepare and cut material to differing lengths and angles using computer programmable optimising equipment. It requires the ability to select and load programs and cutting sequences, assess problems and determine appropriate responses

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 FPICOT3206A Cut material using high speed optimiser

Application of the Unit

Application of the unit

The unit involves cutting material using a high speed optimiser 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

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 cutting	<p>1.1. Applicable <i>occupational health and safety</i> (OHS), <i>environmental</i>, <i>legislative</i> and <i>organisational requirements</i> relevant to cutting material using high speed optimiser are identified and followed</p> <p>1.2. <i>Job requirements</i> are obtained from work order or computer download in line with site procedures</p> <p>1.3. <i>Materials</i> suitable for cutting to length and angles are obtained from pre-selected order or identified from available stock</p> <p>1.4. <i>Program requirements</i> are selected and loaded, and machine cycle is checked in line with site procedures</p> <p>1.5. Material cutting patterns and saw setup sequences are identified to enable loading of boards for cutting</p> <p>1.6. <i>Cutting equipment</i> is checked, adjustments made where necessary, and started in line with manufacturer recommendations and site procedures</p> <p>1.7. <i>Communication</i> with others is established and maintained in line with OHS requirements</p>
2. Operate programmed machinery	<p>2.1. Materials are loaded and machinery is operated in line with planned cutting sequence, specifications and OHS requirements</p> <p>2.2. First board cut after setup is checked for length and angle to site or order tolerances, and setup is adjusted as required</p> <p>2.3. Equipment lock-out procedures are applied in line with OHS requirements and site procedures</p> <p>2.4. Off-cuts and rejected boards are identified, segregated and <i>disposed of</i> in line with site procedures and environmental requirements</p> <p>2.5. <i>Problems</i> are identified, assessed and resolved or promptly reported in line with site procedures</p>
3. Monitor and adjust processing	<p>3.1. Processing is regularly <i>monitored</i> and minor problems are resolved in line with OHS requirements, site procedures and tolerances</p> <p>3.2. <i>Equipment is maintained</i> in line with OHS requirements, site procedures and manufacturer recommendations</p> <p>3.3. Major problems and equipment <i>faults</i> are promptly reported in line with site procedures</p> <p>3.4. Work area is regularly cleared of off-cuts and sawdust in line with site standards, and</p>

ELEMENT**PERFORMANCE CRITERIA**

- environmental and OHS requirements
- 3.5. Production and quality *records and reports* are processed in line with site procedures and organisational 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; load and run machinery programs in line with cutting requirements and specifications; visually assess a variety of board samples; safely carry out minor equipment maintenance, including removing and replacing saw blades
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others
- Literacy skills sufficient to record and report 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 and codes of practice relevant to the full range of processes for cutting material using high speed optimisers
- Environmental protection requirements, including the safe disposal of waste material (including preservative treated timber), and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for cutting material using high speed optimisers
- Environmental risks and hazards
- Criteria for recycling and re-using off-cuts and reject boards
- Using energy effectively and efficiently
- Using material effectively and efficiently
- Cutting sequences and patterns
- Standard cross sections, length dimensions and tolerances
- Basic principles governing operation of computer-programmed equipment, including lock-out procedures

REQUIRED SKILLS AND KNOWLEDGE

- 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
- 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 prepare and undertake cutting processes using computer programmable high speed optimising equipment, and resolve problems and faults in line with site procedures

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 cutting material using high speed optimiser
- following organisational policies and procedures relevant to cutting material using high speed optimiser
- preparing optimising machinery for cutting, including selecting and loading programs
- operating programmed machinery, including maintaining equipment and cutters, and assessing and resolving problems

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

EVIDENCE GUIDE

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
- 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.

RANGE STATEMENT

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
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- manual handling including shifting, lifting and carrying

Environmental requirements may include:

- legislation
- organisational policies and procedures
- workplace practices

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)

Job requirements may include:

- required quantities
- sizes
- lengths
- angles
- timber cross sections to be finger jointed
- finger joint profiles
- required/acceptable cleat lengths
- finished product grades
- quantities to be produced
- changeover times

Materials may include:

- all products handled by the enterprise
- timber types, including laminated veneer
- plywood
- chipboard
- MDF
- dressed timber
- preservative treated and finger jointed
- end condition
- position and size of knots and other faults
- industry and site standards for allowable wane
- applicable grading standards
- visual assessment for timber species and characteristics

Program requirements

may be selected from a range of available programs or a computer download, identifying and reporting the need for new programs

Cutting equipment may include:

- computer-controlled docking
- optimising and trimming saws to which boards are mechanically fed
- single or multiple saw positions

Communication may include:

- verbal and non-verbal language
- constructive feedback
- active listening

RANGE STATEMENT

- 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
- recycling off-cuts and reject boards
- re-using off-cuts and reject boards
- redirecting off-cuts and reject boards for energy recovery

Disposing of may include:

Problems

may be minor or major and relate to:

- equipment and machinery faults and malfunctions
- programming
- suitability of materials
- loading of programs
- machine cycles
- material cutting patterns
- saw setup sequences
- loading of boards for cutting
- quality of product
- interruptions to production schedule
- processing faults

Monitored may include:

- regular checking dimensions and finish of cut materials
- feed systems
- material flow
- equipment function
- clearance of off-cuts and sawdust around saw

Equipment maintenance may include:

- recognising characteristics of blunt and damaged saws
- removing and replacing saw blades
- reporting equipment faults

Faults may include:

- blunt or damaged cutters
- inadequate supply of materials
- disruption to continuity of flow
- sub-optimal production rate and finish

Records and reports may include:

- equipment logs
- tally sheets

RANGE STATEMENT

- quality sheets and forms
- production sheets and downtime sheets

and may relate to:

- production details
- maintenance details
- breakdowns or equipment faults
- computer problems
- interruptions to production

and may be:

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

Unit Sector(s)

Not Applicable

Competency field

Competency field

Common Technical