



Australian Government

Department of Education, Employment and Workplace Relations

LMFCP3002A Select and season timber for coopering production

Revision Number: 1

LMFCP3002A Select and season timber for coopering production

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the competency required to select and season timbers for use in coopering production by applying knowledge of production and timber technology to determine timber requirements, evaluate selected timber and season timber.
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Application of the Unit

Application of the unit	This unit supports the attainment of skills and knowledge required for competent workplace performance in coopering operations. Select and season timber for coopering production applies to a factory or plant environment and involves the application of skills and knowledge at a tradesperson level. These skills and knowledge are to be used within the scope of the individual's job and authority.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	Nil	

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine timber requirements	1.1. Applicable OHS, legislative and organisational requirements relevant to coopering operations are verified and complied with 1.2. Work order is reviewed, confirmed and clarified with appropriate personnel 1.3. Structural requirements for timbers are determined from analysis of intended use and commercial requirements 1.4. Timber is selected from pallet or storage and assessed for general suitability in accordance with selection criteria
2. Evaluate the selected timber	2.1. Moisture content of selected timber is determined to ensure compliance with production requirements 2.2. Density and working properties of timber are determined to ensure compliance with production requirements 2.3. Any faults or features in the timber are identified and strategies are identified to overcome/minimise their effects 2.4. Timber selected for immediate use is transferred to appropriate holding area
3. Season timber	3.1. The outcomes of the timber evaluation are analysed to determine the seasoning requirement 3.2. The optimal drying pattern, mixing artificial and natural drying techniques, is selected 3.3. Artificial drying process is planned and details are confirmed before commencing 3.4. Artificial drying equipment is operated to manufacturer's specifications and recommended process 3.5. The artificial drying operation is carried out, with regular monitoring of moisture levels and targeted outcomes 3.6. Timber is transferred to the natural drying site and stored to optimise drying potential 3.7. Timber is monitored for moisture content and condition 3.8. Site timber records are maintained and processed

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- collect, organise and understand timber technology information related to coopering products
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- maintain quality records related to timber seasoning
- work with others and in a team by recognising dependencies and using co-operative approaches to optimise work flow and productivity
- identify, anticipate and respond to faults in timber and/or seasoning processes
- recognise and respond to circumstances outside instructions or personal competence
- plan and organise activities, including the preparation and layout of own worksite and the obtaining and use of tools and materials to avoid any backtracking, work flow interruptions or wastage
- use mathematical ideas and techniques to correctly complete measurements, calculate area and volume, estimate seasoning criteria and estimate other material requirements
- clarify and confirm work instructions
- plan own work within the given task parameters
- accept responsibility for given tasks
- set, monitor and satisfy personal work goals
- satisfy the competency requirements for the job
- maintain current knowledge of tools and materials
- maintain current knowledge of coopering techniques
- seek learning opportunities
- use workplace technology related to the selection and seasoning of timber, including calculators, measuring devices and drying systems

Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to the full range of processes for coopering operation
- barrel construction terminology and techniques
- barrel repair terminology and techniques
- organisational and site standards, requirements, policies and procedures for coopering
- types of timbers used in the coopering industry, their characteristics, uses and limitations

REQUIRED SKILLS AND KNOWLEDGE

- types and sources of oak and the advantage/disadvantages of each
- the effects of the structure of timber, including:
 - parts of the tree
 - tree cell structure
 - optimum stave production techniques
- types of seasoning and the impacts of techniques, including combination techniques, on the cell structure
- environmental protection requirements relating to the disposal of waste material
- established communication channels and protocols
- problem identification and resolution
- set up and operation of artificial drying equipment/systems
- storage systems and labelling
- procedures for the recording, reporting and maintenance of workplace records and information
- appropriate mathematical procedures for estimation and measurement

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.

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

- Read and interpret a work/job specification
- Select and evaluate a range of timber for coopering including the determination of moisture content and density
- Correctly identify the causes of a range of faults or features in timber
- Season timber using a combination of artificial and natural drying processes
- Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for coopering operations
- Communicate effectively and work safely with others in the work area

Context of, and specific resources for assessment

- The application of 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 underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to the selection and seasoning of timber
 - specifications and work instructions

Method of assessment

Assessment must satisfy the endorsed assessment guidelines of the Furnishing Industry 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 underpinning knowledge

Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and

EVIDENCE GUIDE

	application 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
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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 accordance with Commonwealth, State or Territory legislation and regulations, organisational safety policies and procedures. Requirements may include but not be limited to the use of personal protective equipment and clothing, fire fighting equipment, First Aid equipment, hazard and risk control and elimination of hazardous materials and substances, manual handling, including lifting and carrying

Legislative requirements

- are to be in accordance with applicable legislation from all levels of government that affect organisational operation. Requirements may include but not be limited to 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 and heritage

Organisational requirements

- may include but not be limited to 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, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)

Work order

- is used to determine job requirements, including materials, tolerances and quantity

Appropriate personnel

- may include but not be limited to supervisors, suppliers, clients, colleagues and managers

RANGE STATEMENT	
Timber	- used in the broader coopering operations may include French/American/Australian oak, red gum, maple spruce, jarrah, birch, cyprus, elm and fir - oak, in cooperage usage, means timber from selected species of Quercus
Moisture content	is the moisture content of timber when it is at equilibrium with the moisture content of the air around it and is expressed as a proportion of the oven dry weight of the timber. At this point timber will gain or lose moisture as the humidity of the air around it changes, with commensurate shrinkage and expansion
Faults or features	include knots, sapwood, splits and shakes, rot and decay and insect attack (worm holes), shrinkage, mineral streak or brown stripe
Artificial drying methods	may include powered kilns, conveyor drier systems, vacuum dryers and a variety of dehumidifiers
Storage	must ensure that there is no obstruction of traffic, components and products are not damaged in storage and products are accessible for further distribution/despatch
Records and reports	may include but not be limited to the product type, size, inspection, grading and labelling outcomes, quality outcomes and storage locations

Unit Sector(s)

Unit sector	Coopering
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		