**FPIC2030A Debark logs**

**Unit Descriptor**
This unit specifies the outcomes required to debark logs to a set diameter and length. The unit includes assessing logs for diameter, species, faults and moisture content.

**Pre-requisite Unit(s)**
FPICOR2005A Follow OH&S policies and procedures

**Application of the Unit**

**Competency Field**
Forest and Forest Products

**Sector**
Common Technical

**ELEMENT**
Elements describe the essential outcomes of a unit of competency

**PERFORMANCE CRITERIA**
Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

1. **Prepare for debarking**
   1.1 Applicable **OH&S, legislative** and **organisational** requirements relevant to debarking logs are verified and complied with
   1.2 **Work order** is reviewed, confirmed and clarified with **appropriate personnel**
   1.3 Type and quantity of **logs** to be **debarked** are selected from the **storage location**
   1.4 **Equipment** is selected appropriate to work requirements and checked for operational effectiveness in accordance with manufacturers recommendations
   1.5 Debarking process is planned in accordance with site procedures
   1.6 **Communication** with others is established and maintained in accordance with OH&S requirements

2. **Debark logs**
   2.1 **Pre start-up checks** are carried out on equipment in accordance with site requirements
   2.2 Material is fed in to the machine at the **feed rate** prescribed by organisational requirements
   2.3 Debarking process is maintained and adjusted to produce the required quantity of logs and maximise the feed rate
   2.4 Debarking process and **conveyors** are regularly checked and adjusted to maintain the desired quality and output
   2.5 Logs with **defects** are segregated or rejected and
disposed of in accordance with site procedures

2.6 Debarking process and equipment faults are *recorded and reported* to the appropriate personnel

2.7 Debarked logs are safely directed to storage in a designated location in accordance with work order requirements

3 Conduct operator maintenance

3.1 Equipment lock out procedures are followed in accordance with OH&S legislation and site procedures

3.2 Cutters are checked for blunt or damaged condition in accordance with site procedures

3.3 Cutters are removed and replaced in accordance with manufacturers recommendations

3.4 Machine area is kept clear of dust and debris in accordance with OH&S requirements

**REQUIRED SKILLS AND KNOWLEDGE**

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

**Required skills include:**

- Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for debarking logs
- Use and maintain relevant tools, machinery and equipment
- Identify problems and equipment faults and demonstrate appropriate response procedures
- Use appropriate communication and interpersonal techniques with colleagues and others
- Accurately record and maintain information relating to debarking logs
- Efficiently and safely debark logs

**Required knowledge and understanding include:**

- State/Territory OH&S legislation, regulations, standards and codes of practice relevant to the full range of processes for debarking logs
- Organisational and site standards, requirements, policies and procedures for debarking logs
- Environmental protection requirements relating to the disposal of waste material
- Established communication channels and protocols
- Problem identification and resolution
• Types of tools and equipment and procedures for their safe use, operation and maintenance
• Debarking systems
• Characteristics of timber and timber defects
• Debarking processes, feed rates and finish
• Cutter condition assessment
• Storage systems and labelling
• Procedures for the recording, reporting and maintenance of workplace records and information
• Appropriate mathematical procedures for estimation and measurement

KEY COMPETENCIES
The seven key competencies represent generic skills considered necessary for effective participation by an individual in the workplace.

Performance Level 1 – at this level, the candidate is required to undertake tasks effectively
Performance Level 2 – at this level, the candidate is required to manage tasks
Performance Level 3 – at this level, the candidate is required to use concepts for evaluating and reshaping tasks

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are ideas and information communicated within this competency?</td>
<td>Ideas and information, verbal and written, are communicated in simple English to confirm work requirements, convey information and requests to colleagues, and report and record outcomes for debarking logs.</td>
<td>1</td>
</tr>
<tr>
<td>How can information be collected, analysed and organised?</td>
<td>Collect, organise, interpret and understand information required to undertake debarking of logs.</td>
<td>1</td>
</tr>
<tr>
<td>How are activities planned and organised?</td>
<td>Organise and conduct work task activities in the correct sequence for debarking logs to be completed within the designated timeframes.</td>
<td>1</td>
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<tr>
<td>How is team work used within this competency?</td>
<td>Effective communication and interpersonal techniques are used with colleagues and others to maximise confidence, satisfaction and productivity during the process of debarking logs.</td>
<td>1</td>
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</tbody>
</table>
How are mathematical ideas and techniques used?

Mathematical ideas and techniques are used to calculate time to complete tasks and to estimate tools, equipment and material requirements including setting diameters, lengths, machine feed rates and output.

1

How are problem solving skills applied?

Establish safe and effective log debarking processes which anticipate likely problems to avoid wastage and downtime.

1

How is use of technology applied?

Select and use debarking equipment to debark logs.

1

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 in the Performance Criteria is detailed below. Add any 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.

**OH&S 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, and required actions relating to forest fire

**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, OH&S, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice, duty of care, and heritage and traditional land owners issues

**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, OH&S, 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)
<table>
<thead>
<tr>
<th><strong>Work order</strong></th>
<th>is to include instructions for the debarking of logs and despatch of logs from the work site to down-stream processing and may include species, diameter, length, quantity and grade</th>
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</thead>
<tbody>
<tr>
<td><strong>Appropriate personnel</strong></td>
<td>may include but not be limited to supervisors, suppliers, clients, colleagues and managers</td>
</tr>
<tr>
<td><strong>Logs</strong></td>
<td>are to include assessment of diameter range, curvature, faults, species and moisture content</td>
</tr>
<tr>
<td><strong>Debarking</strong></td>
<td>is the process of forcing a log through a debarking machine which strips the log bare of its bark, making the log available for further down-stream processing and out-feeding the bark for landscaping supplies</td>
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<tr>
<td><strong>Storage locations</strong></td>
<td>may include but not be limited to storage racks, storage bays, bins, stacks, pallet boxes, modularised storage components, temporary stacking bays (stand, frame or ground) and may be divided into standard product classification, product designation, size, dimension, stack number, weight, grade, shelf life or stock rotation position</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td>is to include but not be limited to measuring equipment, de-barking plant and may include computer automated systems, automated storage-conveyor systems and automated diameter and length sorting systems</td>
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<td></td>
<td>is to include procedures for machine lock out protecting operators and co-workers from accidental injury by isolating the machine from the power source</td>
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<tr>
<td><strong>Communication</strong></td>
<td>may include verbal and non-verbal language, constructive feedback, active listening, questioning to clarify and confirm understanding, use of positive, confident and co-operative language, use of language and concepts appropriate to individual social and cultural differences, control of tone of voice and body language</td>
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<tr>
<td><strong>Pre start-up checks</strong></td>
<td>are conducted to ensure the debarking plant has been set-up correctly, cutters are installed accurately and machinery operating to optimum performance</td>
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<tr>
<td><strong>Feed rate</strong></td>
<td>is to include the rate of speed the material is passed through the machine affecting the sharpness of the cutters, the finish of the material and the production output</td>
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<tr>
<td><strong>Conveyor</strong></td>
<td>are to include belts, chutes or travelator methods of transporting logs to and from the de-barker, these may be automated in conjunction with the log storage area</td>
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Defects

- may include but not be limited to incorrect moisture content, warp, wane, curvature, shakes, insect defects, knots and resin pockets

Records and reports

- may include but not be limited to de-barking system, product type, size, inspection, grading and labelling outcomes, storage locations, quality outcomes, hazards, incidents or equipment malfunctions

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment

- A person who demonstrates competency in this standard must be able to provide evidence that they can safely and efficiently debark logs within organisational requirements

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

- Compliance with OH&S, environmental, and organisational/site policies and procedures, and State/Territory legislation applicable to debarking logs

- Communicate effectively and work safely with others in the work area

- Efficiently debark logs in accordance with the work order and within prescribed organisational specifications

- Effectively conduct operator maintenance on de-barking equipment

- Efficiently store logs in accordance with organisational requirements and OH&S regulations

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 debarking logs
Method of assessment

- Specifications and work instructions

• Assessment must satisfy the endorsed assessment guidelines of the Forest and Forest Products 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 must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies.

• Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning 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, including those listed above.