Modification history

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| Release | Comments |
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 5.0. |

| FWPCOT3XXX | Apply principles of timber and process optimisation in sawmill operations |
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| Application | This unit of competency describes the skills and knowledge required to apply optimisation principles in sawmilling operations to increase timber value and volume recovery. It includes identifying the drivers for optimisation, assessing opportunities for timber and workflow optimisation, identifying optimisation opportunities in own work area and participating in and evaluating optimisation initiatives.  The unit applies to individuals who are involved in timber and process optimisation in sawmilling operations.  All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.  No occupational licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | COT |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Identify opportunities for optimisation in sawmilling operations | 1.1 Identify drivers for optimisation in sawmilling operations  1.2 Identify potential impact of timber and material flow optimisation on timber value and volume recovery in sawmill operations  1.3 Assess opportunities for timber optimisation in saw milling operations  1.4 Assess opportunities for material flow optimisation in sawmilling operations  1.5 Identify the technologies and work practices that are applied to enhance timber and work flow optimisation in sawmill operations |
| 2. Identify optimisation opportunities in own work area | 2.1 Compare current work practices, procedures, processes or equipment performance in own work area with requirements or performance indicators in relation to timber value and volume recovery  2.2. Recognise variances that indicate sub-optimal performance  2.3. Identify causes of sub-optimal performance and recommend corrective actions to relevant personnel |
| 3. Participate in optimisation initiative | 3.1 Participate in an approved optimisation initiative and monitor performance  3.2 Assess results of optimisation initiative  3.2 Record outcomes of actions and communicate them to relevant personnel |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Extract key information from workplace documents on optimisation initiatives |
| Writing | * Prepare routine written reports using required format, language and structure |
| Oral Communication | * Employ active listening and questioning to clarify content of work orders |
| Numeracy | * Interpret graphical and statistical data used to describe and show in timber production, equipment performance and value recovery |
| Navigate the world of work | * Understand main tasks, responsibilities and boundaries of own role |
| Interact with others | * Use modes of communication suitable to purpose to confirm and clarify understanding |
| Get the work done | * Recognise and respond to routine problems |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPCOT3XXX Apply principles of timber and process optimisation in sawmill operations | Not applicable | New unit | Not applicable |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47 |

| TITLE | Assessment requirements for FWPCOT3XXX Apply principles of timber and process optimisation in sawmill operations |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all the elements and performance criteria in this unit. There must be evidence that the individual has, on at least one occasion, identified opportunities for timber and workflow optimisation in own work area and has:   * identified the drivers for optimisation * distinguished between timber and work flow optimisation * identified opportunities for timber and workflow optimisation in own work area * made recommendations to correct sub-optimal performance in own work area * participated in one optimisation initiative | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of   * timber value and volume recovery * definition * ways of measuring * drivers for optimisation in sawmilling operations * efficiency * productivity * quality * competitiveness * distinction between timber and material flow optimisation * measures to improve timber and material flow optimisation * impact of timber and material flow optimisation on timber value and volume recovery in sawmill operations * opportunities for timber optimisation in saw milling operations in one or more of the following areas * log sorting * sawing in the green mill * dry mill processing' * grading * timber treatment * opportunities for material flow optimisation in sawmilling operations * technologies applied to enhance timber and work flow optimisation in sawmill operations * 3D, X-Ray and acoustic scanning devices * Automated transfer systems * computer-assisted machine centres for sawing and re-sawing * work practices applied to enhance timber and work flow optimisation in sawmill operations |
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| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions * skills must be demonstrated in a forest product factory setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * workplace documents that provide basic information on work practices, procedures, processes or equipment performance in own work area * workplace documents that provide basic information on requirements or performance indicators in relation to timber value and volume recovery * access to and opportunity to participate in a real or simulated optimisation initiative relevant to sawmilling operations   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and / or standards. |

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