Modification history

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

| FWPSAW3XXX | Assess and maintain band saw wheels |
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| Application | This unit of competency describes the skills and knowledge required to fit special wheel dressing equipment to band saw resurface the band wheel profile and reassemble the band saw in readiness for return to service.  The unit applies to individuals who recondition band saw wheels in a forest and forest product factory settings.  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 | Sawmilling and Processing |

| 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. Prepare for reconditioning | 1.1 Review work order to determine job requirements and where required seek clarification from appropriate personnel  1.2 Review environmental protection procedures and workplace health and safety requirements including use of personal protective equipment, equipment lockout and safe manual handling techniques  1.3 Identify, assess and take actions to mitigate risks and hazards associated with reconditioning band saw wheels  1.4 Identify and implement workplace procedures for minimising waste material and maximising energy efficiency  1.5 Select appropriate tools and equipment and check for operational effectiveness according to manufacturer recommendations |
| 2. Assess and resurface wheel profile | 2.1 Inspect and measure band wheel to identify wear and level of stock removal required  2.2 Service, fit and align wheel resurfacing equipment to band wheel and band saw according to manufacturer instructions and recommended tolerances  2.3 Make a trial cut to check and further align resurfacer  2.4 Dress band wheel to remove all wear, ensuring face is not hollow  2.5 Control resurfacing feeds to obtain required band wheel profile and finish  2.6 Measure band wheel to ensure wheel diameter meets workplace requirements  2.7 Measure band wheel profile to ensure resurfacing has achieved required profile |
| 3. Reassemble band saw | 3.1 Remove resurfacer and base plate from band saw when resurfacing is complete  3.2 Reassemble band saw components according to manufacturer instructions  3.3 Set up band saw blade on saw according to the specified alignment  3.4 Test the band saw blade and saw to ensure correct operation  3.5 Remove isolation padlocks or tags at the completion of work according to workplace safety procedures  3.6 Identify routine processing and equipment faults and resolve or report to appropriate 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 essential information from operational manuals to determine safe operating procedures for equipment |
| Writing | * Prepare routine written reports using the required format, language and structure |
| Oral Communication | * Employ active listening and questioning to clarify content of work orders |
| Numeracy | * Use measuring equipment to take wheel measurements accurately * Estimate the speed of band saw wheel rotation with the speed and depth of cut * Perform precise calculations to determine wheel alignment, alignment of saw guides to wheel faces and wheel thickness * Use standards units of measurement for speed and dimension * Use basic mathematical skills to: * calculate the position of a crown given wheel face width * calculate the position of a crown given maximum and minimum saw blade widths * calculate crown height given wheel diameter or circumference |
| Navigate the world of work | * Identify 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 |
| FWPSAW3XXX Assess and maintain band saw wheels | FWPSAW3222 Recondition band mill wheels  Release 1 | Updated unit code and title for clarity and compliance; revised workplace health and safety requirements; removed reference to tasks which are no longer required in sawmills. | Equivalent |

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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 FWPSAW3XXX Assess and maintain band saw wheels |
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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, on at least on one occasion, the individual has:   * followed workplace health and safety procedures relevant to the resurfacing process * assessed condition of the band saw wheels * resurfaced the faces of the band saw wheels to the specified requirements * reassembled the band saw components * set up a band saw blade on the saw to the specific alignment * tested operational effectiveness of the band saw. | |

| Knowledge Evidence |
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| A person competent in this unit must be able to demonstrate knowledge of:   * purpose, features and operation of the band saw wheels * features and names of different parts of band saws * purpose, features and operation of tools and equipment used to recondition band saw wheels: * resurfacing equipment * measuring equipment * importance of aligning band saw wheels for continued accuracy during band saw operation * methods for: * assessing the condition of band saw wheels * Resurfacing the faces of the band saw wheels to specified requirements * re-assembling band saw components * setting up band saw blades on the saw to a specific alignment * testing operational effectiveness of band saws * wheel profiles and appropriate tolerances * range of speeds at which resurfacers can be operated without damaging band saw wheels * types of risk and hazards and mitigation measures associated with resurfacing band saw wheels * workplace procedures specific to resurfacing band saw wheels: * workplace health and safety with particular emphasis on equipment lockout, use of personal protective equipment (PPE) and safe manual handling techniques * communication reporting lines * recording and reporting processing and equipment faults * environmental protection practices for repairing and maintaining equipment in sawmills: * reducing water and energy use * cleaning plant, tools and equipment * disposing of, recycling and reusing materials. |

| 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 sawmill or an environment that accurately represents workplace conditions * resources, equipment and materials: * resurfacing or wheel grinding equipment * measuring equipment * band saws including the entire mechanical structure and componentry that make up the machine * band wheels to be resurfaced * PPE suitable for reconditioning band saw wheels * specifications: * manufacturer instructions for use, repair and maintenance of equipment * work order with specific instructions for resurfacing band saw wheels in specified equipment * template documents for recording processing and equipment faults * workplace procedures for reconditioning band saw wheels.   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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