



Australian Government

Assessment Requirements for FWPSAW3236 Sharpen tipped circular saw blades

Release: 1

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Modification History

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

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- followed work order and relevant workplace health and safety and environmental protection procedures
- assessed the condition of blade teeth for:
 - sharpness of each tooth
 - damage to teeth
 - pitch
 - kerf width
- set up the sharpening machine
- sharpened tipped circular saw blades according to a work order and workplace requirements
- removed tipped circular saw blades from sharpening equipment.

Knowledge Evidence

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:

- basic knowledge of physics of sawing, including:
 - saw blade material and properties
 - impact of timber properties on saw blades
 - direction of cut
 - forces on a blade
 - heat removal
 - sawtooth configuration
- purpose, features and operation of circular saws for which tipped blades are sharpened:

- circular saws for timber processing
- cold saws for ferrous and non-ferrous alloys
- features and names of different parts of circular saw blades
- purpose, features and operation of tools and equipment used to sharpen tipped circular saw blades:
 - automated grinding machine with manual or automatic adjustment
 - abrasive wheels
- coolants used in the sharpening process, and impact on efficient sharpening
- importance of sharpening and tension to match requirements for:
 - characteristics of various materials sawn
 - speed of the sawing process
 - direction of the sawing process
 - cutting angle for sawing
 - saw blade specifications
- methods for:
 - assessing saw blade condition
 - sharpening blades to specified requirements
 - setting teeth to a specified kerf
 - maintaining concentricity of teeth
- tooth pitch and tooth angles at which blades are sharpened (blade geometry)
- range of speeds at which abrasive wheels can be operated without damaging blades
- types of risk and hazards and mitigation measures associated with sharpening tipped circular saw blades
- workplace procedures specific to sharpening tipped circular saw blades:
 - workplace health and safety, with particular emphasis on safe manual handling and use of personal protective equipment (PPE)
 - communication reporting lines
 - recording and reporting processing and equipment faults
- environmental protection practices for repairing and maintaining tools and equipment in sawmills:
 - reducing water and energy use
 - cleaning plant, tools and equipment
 - disposing of, recycling and reusing materials.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a saw technician workshop, a sawmill or an environment that accurately represents workplace conditions
- resources, equipment and materials:

- tools and equipment used to sharpen tipped circular saw blades, including manually or automatically adjustable grinding machines, abrasive wheels and measuring equipment
- circular saws for which blades are to be sharpened, including circular saws and cold saws
- tipped circular saw blades for sharpening
- PPE suitable for sharpening tipped circular saw blades
- specifications:
 - template documents for recording processing and equipment faults
 - manufacturer instructions for use, repair and maintenance of equipment
 - work order with specific instructions for sharpening tipped circular saw blades
 - workplace procedures for sharpening tipped circular saw blades.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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