



Australian Government

Assessment Requirements for FWPCOT3283 Sharpen and position blades or knives in chipper, canter and reducer

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 sharpened and set up blades or knives for one or more of the following timber sawing machines:

- chipper
- canter
- reducer.

In doing the above, the individual has:

- read and clarified work order to determine job requirements
- applied workplace health and safety requirements, including the use of personal protective equipment (PPE), equipment lock-out and safe manual handling techniques
- removed and replaced blade or knife for sharpening from the designated machine
- assessed blade or knife condition
- set up and operated grinder to sharpen blades or knives
- applied Babbitt process and set screw process for positioning blades or knives in the designated machine
- recorded and reported processing problems and equipment faults to appropriate personnel.

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:

- purpose, features and operation of one of the following sawing machines for which blades and knives are sharpened:
 - chipper
 - canter
 - reducer

- fundamental blade or knife properties:
 - metal from which blades and knives are made
 - geometry
- features of a typical blade or knife defect:
 - burrs
 - burns
 - chips
 - splits
 - dents
- basic knowledge of physics of timber sawing:
 - blade or knife material and properties
 - impact of timber properties on blades or knives
 - direction of cut
 - forces on a blade or knife
 - heat removal
- purpose, features and operation of equipment used to sharpen and set up blades or knives:
 - grinding machines
 - grinding machine attachments
 - abrasive grinding wheels
 - Babbitt making equipment
 - set-screw equipment
- methods for:
 - removing blades or knives from machine
 - assessing blade or knife condition
 - selecting appropriate grinding wheels, diameter and material
 - cleaning blades or knives
 - sharpening blades or knives to specified requirements
 - reconditioning Babbitts and set screws
 - setting up blades or knives to specified requirements
- angles at which blades or knives are sharpened
- range of speeds at which abrasive wheels can be operated without damaging blades or knives
- coolants used in sharpening process, and impact on efficient sharpening
- types of risk and hazards and mitigation measures associated with sharpening and setting up blades and knives
- workplace procedures specific to sharpening and setting up blades and knives:
 - workplace health and safety, with particular emphasis on machine lock-out, the use of PPE and safe manual handling techniques
 - communication reporting lines
 - recording and reporting of processing problems and equipment faults

- environmental protection practices applicable to timber processing or manufacturing facilities.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a timber processing or manufacturing facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - grinding machines and ancillary equipment
 - abrasive grinding wheels in a variety of diameters and types
 - Babbitt making equipment
 - one or more of the following machines for which blades and knives are to be sharpened: chipper, canter, reducer
 - suitable blades or knives for sharpening
 - consumable coolant and set screws
 - PPE suitable for sharpening and aligning blades and knives
- specifications:
 - template documents for recording production output, processing problems and equipment faults
 - manufacturer instructions for use, repair and maintenance of equipment
 - work order with specific instructions for sharpening and aligning blades and knives in specified machines
 - workplace procedures for sharpening and aligning blades and knives.

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>