



Australian Government

Assessment Requirements for FWPSAW3238 Replace Stellite tips

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 condition of Stellite tips
- prepared tips for replacement
- removed and replaced Stellite tips, including:
 - brazed or welded new Stellite tips onto the tooth face or tooth seat
 - replaced tips that are broken, missing or worn out
 - rebuilt broken or damaged tips.

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 saw blades that use Stellite tips:
 - band saw blades
 - circular saw blades
- features and names of different parts of saw blades
- purpose, features and operation of tools and equipment used to replace Stellite tips:

- automatic or semi-automatic tipping machines
- brazing equipment and brazing material
- brazing jigs
- methods for:
 - removing saw blades from sawing equipment
 - assessing saw blade condition
 - removing Stellite tips from saw blades
 - brazing and welding new Stellite tipped teeth onto the tooth face or gullet
- annealing processes and temperatures for Stellite tips and saw blades
- appropriate tolerances for weld deposits and replacement tip sizes
- characteristics of metal used in saw blades, and effects of brazing and welding on saw steel
- types of risk and hazards and mitigation measures associated with replacing Stellite tips
- workplace procedures specific to replacing Stellite tips:
 - workplace health and safety, with particular emphasis on equipment lock-out, use of personal protective equipment (PPE) and safe manual handling techniques
 - communication reporting lines
 - recording and reporting of processing and equipment faults
- environmental protection practices for repairing and maintaining saw blades:
 - 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:
 - one or more of the following types of tools and equipment used to replace Stellite tips: automatic or semi-automatic tipping machines, brazing equipment, brazing jigs
 - one or more of the following types of saw blades to be repaired and maintained: band saw blades, circular saw blades
 - Stellite tips
 - brazing material including silver alloy, special shock absorbing shim, flux in the form of a liquid or paste
 - PPE suitable for replacing Stellite tips
- specifications:
 - documents, spreadsheets and proformas for recording processing and equipment faults
 - manufacturer instructions for use, repair and maintenance of equipment

- work order for repair and maintenance activities, with specific instructions for replacing Stellite tips in specified equipment
- workplace procedures for replacing Stellite tips.

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>