

Title	Weld wide bandsaws		
Level	4	Credits	15

Purpose	People credited with this unit standard are able to: demonstrate knowledge of hazards and safe work practices associated with welding wide bandsaws; clean and prepare wide bandsaws for welding; weld wide bandsaws; heat treat welded area; and dress welds.
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Classification	Solid Wood Manufacturing > Saw Doctoring
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Available grade	Achieved
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Guidance Information

- 1 Legislation
Health and Safety at Work Act 2015.
Resource Management Act 1991.
- 2 Definitions
Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider wood manufacturing industry as examples of best practice.
Workplace procedures refer to documented policies and procedures set by the organisation carrying out the work, and to documented or other directions provided to staff, and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor’s instructions, and procedures to comply with legislative and local body requirements relevant to the wood manufacturing sector.
- 3 Range
Welding equipment – MIG welder, TIG torch.
Welds – evidence is required of one butt weld, and one of crack or tooth.
- 4 Assessment information
All activities and evidence must be in accordance with workplace procedures and accepted industry practice.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of hazards and safe work practices associated with welding wide bandsaws.

Performance criteria

- 1.1 Hazards associated with welding wide bandsaws are identified and actions to be taken to manage the hazard are described.
- Range hazards may include but are not limited to – eye damage, sparks, hot objects, sharp objects, electrical, fumes, gasses, heat radiation, ultraviolet radiation.
- 1.2 Safe work practices associated with welding wide bandsaws are identified and applied.
- Range practices may include but are not limited to – isolation procedures, wearing appropriate safety equipment, welding screens.

Outcome 2

Clean and prepare wide bandsaws for welding.

Performance criteria

- 2.1 Saw and work areas are cleaned of all foreign matter that could affect the welding process.
- 2.2 Saw ends are checked for flatness and squareness for butt welding.
- 2.3 Welding equipment is selected, assembled, and prepared.
- Range preparation includes but is not limited to – manual anvil pre-heated or auto table set to required temperature.
- 2.4 Saw is positioned and clamped to prevent movement during further processing.
- 2.5 Weld line is pre-heated to dull blue colour.
- 2.6 Weld is tagged at both ends.

Outcome 3

Weld wide bandsaws.

Performance criteria

- 3.1 Wide bandsaws are welded and so that the weld penetrates the full depth of the saw for the full length of the weld.

3.2 Weld is checked for defects and any remedial action taken.

Range uneven bead, blow-out, porosity (holes), cracking.

Outcome 4

Heat treat welded area.

Performance criteria

4.1 Welded area is annealed, air cooled, and tempered to manufacturer's specifications for time and temperature.

4.2 Weld structure and hardness are checked to ensure they resemble those of parent material.

Outcome 5

Dress welds.

Performance criteria

5.1 Weld is dressed to the same thickness as the parent metal.

Range disc or belt sander or file.

5.2 Weld surface is smooth polished.

Range belt sander or emery cloth.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 January 1994	31 December 2015
Review	2	24 October 1996	31 December 2015
Review	3	10 February 1999	31 December 2015
Review	4	18 December 2006	31 December 2015
Review	5	20 March 2014	N/A
Review	6	24 September 2020	N/A

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.