



Australian Government

TLIW3042 Grind rail on tram/light rail systems

Release: 1

TLIW3042 Grind rail on tram/light rail systems

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to grind rail welds and faults on tram or light rail systems in accordance with approved standards, safeworking and regulatory requirements, and organisational procedures.

It includes determining job requirements, grinding weld and/or weld repair, grinding rail to repair surface defects and completing required documentation.

This competency relates to grinding new welds and welded repairs on the rail and check rail, grinding out corrugations and re-profiling the rail.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

W – Equipment and Systems Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Determine job requirements

1.1 New welds and weld repairs are located

1.2 Corrugations on the rail are identified

1.3 Hazards are identified, risks are assessed and control measures

are implemented

1.4 Appropriate equipment is selected

1.5 Appropriate repair method and/or profile is selected to ensure completed work will meet specifications

1.6 Site is cleared of obstructions and combustible material

2 Grind weld repair

2.1 Rail and check rail are ground to profile using approved equipment in accordance with workplace procedures

2.2 Grinding equipment is operated safely in accordance with work health and safety (WHS)/occupational health and safety (OHS) and environmental requirements

2.3 Rail profile and vertical and horizontal alignment are measured to ensure compliance with acceptance standards

2.4 Rail surface condition is assessed for compliance with rail industry standards

3 Grind rail to repair corrugations

3.1 Rail is ground using approved equipment in accordance with workplace procedures

3.2 Grinding equipment is operated safely in accordance with WHS/OHS and environmental requirements

3.3 Finished surface is checked to ensure compliance with specifications

4 Re-profile rail

4.1 Rail is re-profiled using approved equipment in accordance with workplace procedures

4.2 Equipment is operated safely in accordance with WHS/OHS and environmental requirements

4.3 Finished surface is checked to ensure ground profile complies with organisational requirements and specifications

5 Complete documentation

5.1 Required documentation procedures and processes are confirmed

5.2 Documentation is filled in legibly and proofread

5.3 Documentation is processed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIW3042A Grind rail on tram/light rail systems.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIW3042 Grind rail on tram/light rail systems

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on **at least five** separate occasions and include:

- applying relevant safeworking system and workplace procedures
- grinding rail on tram or light rail system in accordance with workplace specifications and procedures
- identifying job hazards and taking required action to minimise, control or eliminate identified hazards
- interpreting and following operational instructions and prioritising work
- modifying activities depending on operational contingencies, risk situations and environments
- operating and adapting to differences in equipment in accordance with operating procedures
- reading and interpreting relevant technical data, drawings, instructions and manuals
- reporting and/or rectifying identified problems, faults or malfunctions, in accordance with workplace procedures
- selecting and using hand tools, power tools and equipment
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- documentation and record keeping requirements
- grinding methods and results
- hazards that may exist when grinding rail and welds, and ways of controlling the risks involved
- problems that may occur when grinding rail and welds, and action that can be taken to

report or resolve these problems

- rail industry standards for rail profile and surface condition
- relevant safety, work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- workplace procedures for grinding rail and welds.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in *the Standards for Registered Training Organisations* current at the time of assessment.

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Assessment must occur in workplace operational situations or, where this is not available, in simulated workplace operational situations that replicate tram or light rail corridor workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, rail industry standards, codes of practice and operation manuals.

Links

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