



**Australian Government**

# **TLIW0005 Grind switches and crossings**

**Release: 1**

# TLIW0005 Grind switches and crossings

## 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 switches and crossings in accordance with rail network standards, safeworking and regulatory requirements, and workplace procedures.

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

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when grinding switches and crossings, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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

Rail sector.

## Elements and Performance Criteria

### ELEMENTS

### PERFORMANCE CRITERIA

Elements describe the essential    Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

**1 Determine job requirements**

- 1.1** Weld repairs are located
- 1.2** Defects relating to rail surface profile and condition in switches and crossings 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
- 1.7** Traffic management plan is implemented, where required, in accordance with workplace procedures

**2 Grind weld repair**

- 2.1** Switch or crossing is ground to nominated profile after installation or welded repair 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** Switch or crossing profile and alignment are measured to ensure compliance with acceptance standards
- 2.4** Rail surface condition is assessed for compliance with acceptance standards

**3 Grind switch or crossing to repair surface defects**

- 3.1** Switch or crossing 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 acceptance standards

**4 Complete documentation**

- 4.1** Required documentation procedures and processes are confirmed
- 4.2** Documentation is filled in legibly and proofread
- 4.3** Documentation is processed in accordance with

workplace requirements

## **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.

## **Unit Mapping Information**

This unit replaces and is equivalent to TLIW3013 Grind switches and crossings.

## **Links**

Companion Volume Implementation Guides are found in VETNet -

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