

Electric Welding short course

Nominal Hours: 70

Course Description

This is a course designed for individuals who heat and cut materials using oxy-LPG equipment and apply an electric welding process to rail.

It applies to persons wanting to work in the following National Track and Civil Roles as per the Rail Industry Worker (RIW) Matrix:

- Rail Welder (Electric) – National
- Rail Grinder – Switches and Crossings - National

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.



Units of Competency:

- TLIW0006 Heat and cut materials using oxy-LPG equipment for the rail industry
- TLIW0036 Apply electric welding process to rail
- TLIW0005 Grind switches and crossings



Cost:

Initial training and theory assessment: \$3000 per person.

Final competency assessment: \$2200 per person.

Recertification assessment: Required every 2 years. \$2200 per person.

Alternative costs apply for group or onsite training, contact Go-Train to discuss.



Duration:

Initial training and theory assessment: Four consecutive days, 8.00 am - 4.00 pm, in a classroom and non-live rail environment.

Workplace-based training and mentoring: Approximately 6-9 months.

Final competency assessment: On completion of the on-job component, participants must attend a one-day competency assessment at Go-Train.



Work Placement Requirements:

This course requires participants to:

- receive workplace-based training in the job role from an experienced and qualified workplace mentor, while working in the rail corridor.
- have the mentor record the participant's progress in an On-Job Logbook.



Mandatory Personal Protective Equipment:

Participants must provide their own ankle-high steel cap boots, rail approved long-sleeved hi-vis shirt or hi-vis vest over long-sleeved shirt and long pants.

For practical days, participants are required to bring hard hat, safety glasses and gloves appropriate for the job role and workplace.



Entry Requirements:

This course may not be suitable for everyone. Participants must:

- be at least 18 years old at date of enrolment,
- already hold the following certifications, or their equivalent:
 - Category One Medical
 - Safely access the rail corridor TLIF0020
 - Maintain and use hand tools TLIB0012
 - Shift materials safely using manual handling methods TLID0020
 - Participate in basic workplace communications TLIE1003
 - Follow work health and safety procedures TLIF0025
 - Apply fatigue management strategies TLIF2010
 - Apply track fundamentals TLIB2085
 - Apply environmental procedures to rail infrastructure TLIU2008
 - Operate minor mechanical equipment TLIB2092
 - Carry out rail installation TLIS2044
 - Install and repair rail fastening systems TLIS2034
- have suitable employment to facilitate completion of the work experience component,
- have an experienced and qualified workplace supervisor who can mentor the participant through the work experience and Logbook requirements.

Enrolment will only be confirmed once Go-Train have verified an applicant's suitability.

Language, Literacy and Numeracy

Where a participant is deemed, either prior to enrolment or throughout the training program, to possess a lower level of language, literacy or numeracy skills than is the minimum requirement for the course, Go-Train Industry will provide advice and support to the participant regarding further learning options.

At times, additional language or literacy development or remedial assistance may be required prior to the continuation or completion of the participant's course of study. The cost of this further LLN development or remedial assistance would need to be covered by the participant.



What Next?

Before training:

- Participants must provide their Unique Student Identifier (USI) Number, which is required to study in Australia. Go-Train is unable to issue a certificate unless a Participant's USI has been verified. **Please visit www.usi.gov.au for details.**
- To secure a spot in the course participants need to enrol and pay for the course prior to commencement of training. Please contact Go-Train to discuss payment options.
- Participants should contact Go-Train if they think they may be eligible to apply for RPL or Credit Transfer.
- If a participant is unable to attend, they must contact Go-Train as soon as possible. If less than 48 hours' notice of cancellation is provided, Go-Train are unable to refund any fees paid. For our **Refund Policy** visit: www.gotrain.com.au/policies-and-procedures/

On the day of training:

- Bring your RIW Card and Photo ID, preferably a driver's licence showing full name, date of birth and address.
- **Participants must wear covered in shoes.** Please note that we have a **NO THONGS** policy and individuals will be sent home if the correct footwear is not worn.
- Course fees must already be paid in full before attending each stage.

At the course:

- When participants attend training, they will be asked to sign a Training Attendance Sheet. Signing the attendance sheet is an acknowledgement that they have read and understood this Pre-Training Information prior to attending the course.
- This course will initially be delivered in a classroom and non-live rail environment by a qualified and experienced Rail Trainer.
- All learning materials will be provided to participants.
- Participants are required to complete theory assessments during this course.
- On-the-job training and practical assessment will be conducted in the workplace after the formal components of this course.

After classroom training:



- Participants are required to gain work experience under the guidance of a suitably qualified workplace supervisor/mentor.
- Participants will be issued with Logbooks to record on-the-job experience as they work in the applicable role. Workplace mentors must sign off on task requirements when the participant demonstrates them independently and to industry standard.
- Once each Logbook is completed participants need to return to Go-Train to have it reviewed by an assessor.
- If the Participant's logbook is satisfactory, they will undertake the final practical assessment in our non-live rail environment or if required, in the workplace.
- If the assessor feels the Participant needs further experience, the Participant must gather this additional evidence before being approved to undertake final assessment.



After Assessment:

- **Statement of Attainment** - On successful completion of each course, participants will receive a nationally recognised Statement of Attainment showing units completed.
- **Certificate of Achievement** – Listing the appropriate welding competency.
- **Rail Industry Work (RIW) Card** – On receipt of a Certificate, participants will need to update their Rail Industry Worker (RIW) Card. For selected courses, updating RIW is the Participant's or their employer's responsibility, unless Go-Train has agreed to provide this service by prior agreement. Please refer to the <https://www.riw.net.au/> website or contact us for further information.



What Participants may like to study after they complete this course:

Participants may wish to complete further short courses, such as:

- Aluminothermic Rail Welding
- Turnout Construction – Timber and Concrete

Locations

Please contact our office on 1300 698 158 to confirm delivery dates and to enrol.

Students are responsible for any travel to practical locations, their meals and lodgings throughout the course.

Newcastle NSW

Suite 6,
26 Balook Drive.
Beresfield NSW 2322

In The Workplace

We can come to you.
Contact us for group bookings.

Fine Print

Please scan the QR to view our Student Handbook for further information regarding:

- participant rights and obligations as a student of Go-Train Industry Pty Ltd
- our Refund Policy
- our Training and Wellbeing Support Services
- our commitment to Access and Equity principles, including provisions for reasonable adjustment
- our Training Product Transition Policy, in the event a course in which a participant is enrolled is updated in line with national industry standards.



Training Plan

Day	Unit	Description	Assessments
1	TLIW0006 Heat and cut materials using oxy-LPG equipment for the rail industry	<p>This unit involves the skills and knowledge required to heat and cut materials for the rail industry using oxy-LPG equipment.</p> <p>It includes planning and preparing for work, setting up and testing the equipment, heating and cutting materials, shutting down equipment and completing clean-up activities.</p> <p>People achieving competence in this unit will need to fulfil applicable state/territory legislated work health and safety (WHS)/occupational health and safety (OHS) requirements and rail safety requirements, and to comply with relevant codes of practice and/or guidelines.</p>	Theory Assessment

Work involves heating and cutting steel and includes cutting up waste for salvage; cutting steel, rails and bolts; and cutting holes in plate (with the exception of structural steel members). Heating activities include steel and bolts (excluding structural steel members).

2 & 3	<p>TLIW0036 Apply electric welding process to rail</p>	<p>This unit involves the skills and knowledge required to weld rails, crossings and switches using an electric welding process in accordance with rail industry standards, safeworking and regulatory requirements, and workplace procedures.</p> <p>It includes using non-destructive testing to locate defects; preparing rails, crossings or switches for welding; gouging or grinding; setting up welding equipment; performing welding operations; checking weld conformance; and completing required documentation. These processes are used to repair rail surface defects and restore rail profile to plain rail, crossings and switches.</p> <p>People achieving competence in this unit will need to fulfil applicable state/territory legislated rail safety requirements and to comply with rail industry standards, codes of practice and/or guidelines.</p> <p>Work is performed under some supervision, generally in a team environment. It involves the application of routine operational principles and procedures when welding rail using an electric welding process, as part of workplace activities across a variety of operational contexts within the Australian rail system.</p> <p>Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.</p>	Theory Assessment
4	<p>TLIW0005 Grind switches and crossings</p>	<p>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.</p> <p>It includes determining job requirements, grinding weld and/or weld repair, grinding switches and crossings to repair surface defects, and completing all required documentation.</p>	Theory Assessment

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.

5	TLIW0006 Heat and cut materials using oxy-LPG equipment for the rail industry TLIW0036 Apply electric welding process to rail TLIW0005 Grind switches and crossings	After a period of 6-9 months gaining on-the-job experience and completing Logbooks, participants must contact Go-Train for final assessment.	Presentation of Logbook and Final Assessments
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Contact Go-Train on 1300 698 158 to confirm delivery dates and to enrol.