



## Rail Welding – Fundamentals to Frontiers

22nd and 23rd June 2023

Monash Institute of Railway Technology

Monash University

### Presenters:

*Peter Mutton, John Cookson and Iman Salehi*

*Monash Institute of Railway Technology*

*Specialists from the Australian Rail Industry including*

*Pandrol and Thermit Australia*

Day One	Aluminothermic welding + demonstrations
Day Two	Flashbutt welding + demonstrations

The aim of this workshop is to:

- Provide background information on rail welding for supervisors, engineers and managers who are responsible for rail welding or qualifying rail welds at railway operations
- Highlight common issues with both processes found in practice, as well as key factors in resolving them
- Discuss issues arising due to the interpretation as well as the application of the current rail welding standard AS1085.20, and discuss options for future versions of this standard

The format of the workshop will be flexible to allow participants to raise questions regarding the above topics or other rail welding concerns for discussion.

**Venue:** Monash University (Clayton)

**Date:** Thursday 22nd and Friday 23rd June 2023

**Time:** 9.00 – 5.00 (Registration from 8.30am)

**Cost:** *Payable prior to workshop*

Both days: AUD \$1300 + GST

Single Day only: AUD \$ 700 + GST

Morning/afternoon tea, lunch and refreshments will be provided

This is an exclusive event with limited seats; early registration is essential to avoid disappointment. Please feel free to notify others who may be interested in this workshop.

Registration by Friday 9th June 2023

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Please advise if you have any dietary or access requirements.

Endorsed by:



**RTSA**



**Monash Institute of  
Railway Technology**



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### AGENDA

#### Day 1: 22 June 2023 – Aluminothermic welding

- Aluminothermic welding process description - general
- Differences between major process types of AT welds
- Railway operator experiences with aluminothermic welds
- Requirements and issues with standards and specifications, including heavy haul requirements, Australian vs European standards
- Welder training, auditing, procedural compliance and competency requirements
- Onsite aluminothermic welding at Monash IRT

#### Day 2: 23 June 2023– Flashbutt welding

- Flashbutt welding – process basics, new developments
- Fixed vs mobile plants, significance in Australian context
- Standards, specifications and related acceptance requirements
- Railway operator experiences with flashbutt welds
- Rail grade developments and the welding different rail grades
- Quality control procedures, welder training and competency requirements
- On site flashbutt welding at Monash
- Questions and discussion
- Issue of Certificate of Workshop Attendance