This project involved the placement of 46,000 steel sleepers, re-railing in excess of 61,000 metres of rail and removing 6,000 joints. To ensure that disruption to the critical rail network was minimised, all works were performed under live traffic. Over a duration of 18 months, the rail crews were working across remote areas throughout Tasmania.

**Resleepering**
By using an innovative method to replace 46,000 sleepers, VEC were able to utilise their specialised plant and equipment, resulting in high productivity in a challenging work environment.

**Welding**
With up to six weld teams conducting the works, above average productivities were obtained in challenging environments and limited access areas. VEC used internal as well as external welding teams. A third party completed all testing and certification of the track welding.

**Track hand-back**
VEC’s team of Engineers worked to ensure that the clients’ standards were met prior to handing back the track. Using in-house geometry trolleys, the team were able to ensure the track was fit-for-purpose prior to the track hand-back.

**Challenges**
With the majority of the works being conducted in remote areas, there were various project challenges that included fire risk and how to respond to emergency situations. The works were also conducted throughout snowy conditions and inclement weather.

Works around the Cement Australia site had to be performed in a two week shutdown. Extensive work performed included re-sleepering, re-railing, destressing, and resurfacing works. With trains typically running every two hours, it was critical that the works were completed within this two week shutdown. This plant is the only Cement Australia plant in Tasmania and this was the only planned shutdown.

**Innovation**
The methods we have used to accommodate the requirement to cascade replaced rail to facilitate the joint removal is one of the key innovations on this project. Throughout the project, VEC developed a weld quality assurance application, obtained quality trolleys, increased in-house welding capabilities, implemented new project systems such as Envision and utilised the Last Planner System to coordinate the project. An additional 35 jobs were created through the delivery of this project.

**Resurfacing**
It was on this project that the VEC team first used a surfacing machine - the tamper and regulator to resurface the railway. VEC’s Knox Kershaw 800 regulator and Harsco Mark VI tamper form integral items of plant within the VEC rail resurfacing capabilities. This machinery has increased our capacity to secure works within Tasmania and Australia wide, as we are the only company in Tasmania who has the plant and resources in-house.

**The Project**

**Winner of the CCF Earth Award 2018**

This project includes the resleepering, rerailing, level crossing upgrades, ballast replacement/repair for extended sections of the Melba and Western Lines (Tasmania Northwest Region).

The purpose of this project was to remove approximately 4,000 defects in a prioritised order to improve track standards and enhance the rail networks’ trafficability and delivery of service for the Tasmanian rail network users.