McCulloch Rail Solutions

Reduce track construction & maintenance costs and optimise possession time



Reduced construction time with the use of innovative machine technologies

Efficient rail handling and movement equipment to save time and costs

Safer handling methods to minimize accident risks

Flexible solutions for small, medium and large scale projects

Sale or Lease of equipment options to improve cash-flow

Life-time spares and maintenance packages available to reduce total cost of ownership





Comprehensive capabilities for new build, renewal and maintenance of track

By combining the unique equipment with extensive industry knowledge and experience a wide range of solutions can be provided for the installation, moving and removal of sleepers and rail on a worldwide basis utilising the site support network provided by Unipart Group backed up by McCulloch's technical and manufacturing expertise.

The machines are all designed to provide high levels of safety for the operators and minimises the amount of manual handling required of the rail and sleepers to significantly improve the site safety working environment. The equipment is normally controlled by one operator per unit releasing other members of the work team to focus on other tasks. The limited need for manual handling also increases the speed of installation as well as the accuracy of alignment and positioning of the sleeper or rail.

In addition, the reduced installation time taken by the use of McCulloch Rail equipment means that less possession time of the track is required that has a direct impact on the overall cost of the project.

CASE STUDY

A train operator's depot had four new sidings installed over a two day period with the use of McCulloch Rail's FLASS machine and 2 TRT units. The McCulloch Rail site team laid a total of over 730 meters of sleepers with the FLASS unit and delivered and installed 730 meters of 18m (60ft) long rails using the fourrail carrier on the TRTs over the two days.

The site had existing excavation works being carried out which limited the space available to manoeuvre the machinery and it was not possible to complete one line section before moving on to next. To overcome this the FLASS machine was used to install sleepers from one line to the next while the TRTs were delivering and installing the rails.

This depot sidings installation is just one of a large number of individual projects that McCulloch Rail have been involved in with Main Contractors working for Network Rail in the UK to provide site support, training and advice on the most effective and time efficient way to complete projects using a combination of all McCulloch rail plant including FLASS, Panel Lifters and TRTs.







Rail movement and track construction just became easier...

Unipart Group and McCulloch Rail have formed an alliance to enable rail track maintenance and construction projects on a worldwide basis to be completed in less time with reduced operational costs by the use of innovative railway component handling and movement equipment. McCulloch has many years of experience in the development and manufacture of machines that eliminate manual handling and improve the accuracy and efficiency of installations.

By joining forces, Unipart Group and McCulloch can provide a full package of:

- Consultancy services to advise on the most suitable methodology to fulfil a project
- Site visit assessments on how project efficiencies can be achieved
- Machine selection to complete the work schedule in the minimum of track possession time
- Finance options on the purchase or leasing of the machine to suit the client and project
- Spares and maintenance programmes to cover the service life of the machinery to reduce the overall cost of ownership and reduce operational risks

At the core of the capability provided by the two companies is the range of machines that can be adapted to suit the particular requirements of the site and the project.



TRT™

The TRT is the safest, most versatile, rail handling machine on the rail infrastructure.



PANEL LIFTER

The Panel Lifter, versatile lift & carry capabilities of up to 12 tonne.



FLASS™

The FLASS accurately aligns and spaces sleepers totally eliminating manual handling.



RAIL LIFTING AND MOVEMENT

Safe and controlled transportation, recovery/repositioning of rail up to 216 Metres in length.

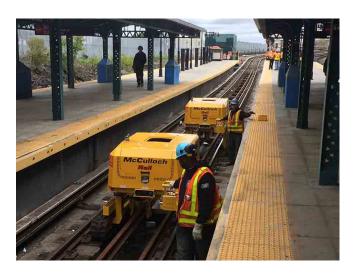


TRTTM

The TRT (Trac Rail Transposer) is a rubber tracked machine suitable for use on rail infrastructures, underground track and light rail networks. The TRT is 2.3 metres long, 1.8 metres in width and 1.6 metres in height making it a compact and easily transportable unit for limited access locations.

The TRT can remove and install all profiles of rail. The TRT can be used to re-position any length of plain line rail from 6m (20ft) up to 425m (1418ft) and can also be utilised to transport, remove and install any length of switches and crossings (S&C) associated iron work.

- The TRT is fully approved to work under live Overhead Line Equipment.
- Removes, installs and repositions rail in a safe controlled manner.
- Ideal for use on single line track layouts.
- Can easily cross multiple tracks including areas with conductor rails.
- Capable of threading rail past lineside equipment/masts etc from one track to another.



PANEL LIFTER

The Panel Lifter is a tracked machine that has a retracted width of 2470mm, enabling improved access, and an extended width of 3665mm to lift wider loads. The Panel Lifters are capable of removing and installing track panels all with different component make up.

The Panel Lifters are completely remotely controlled, creating an instant exclusion zone and eliminating any manual handling issues.

- Huge 12 tonne lifting capability.
- Can work under live Overhead Line Equipment, eliminating costly time consuming isolations.
- Fully remote control creating an exclusion zone and no need for any manual handling.
- Tracked machine with variable track width allowing access and use in narrow environments.
- Ideal for use on single line track layouts.





FLASSTM

The FLASS is a tracked machine that accurately aligns and spaces up to fifteen sleepers per lift. Due to the unique operation of the hydraulic beam, the need for any manual handling, barring, spacing or fine lining is completely eliminated.

The FLASS can install sleepers at an average output of 10 to 12 lengths per hour accurately lined and spaced and in ideal situations 15 length per hour can be installed. Snagging work is eliminated and tamping requirements are reduced giving a material saving to the overall cost of renewals.

- Ideal for use on single line track layouts.
- Can install sleepers at 24, 28 or 30 sleepers per length.
- Can also be used to install 18m (60ft) lengths of rail on to the sleepers it has spaced and lined.
- Fully certified to work under live Overhead Line Equipment.
- Completely eliminates manual handling.





RAIL LIFTING AND MOVEMENT

Over 50% of all accident near misses are directly linked to scrap rail creating a tripping hazards.

A unique method of recovering scrap rail from the infrastructure in a controlled efficient way has been created to transport the rail in gauge and fully supported on the McCulloch Rail trolley system.

The scrap rail is strategically positioned and prepped into the desired lengths stipulated by the client. This maximises the efficiency of the collection process. The rail is loaded and transported to the agreed access point and then unloaded and stacked ready for collection from the access.

New rails such as transition rails, IBJ's, closure rails, switches or crossings can be delivered to an access point, loaded on to the rail trolleys and transported under live overhead line equipment any distance, in gauge through platforms, S&C, bridges or structures and unloaded at the desired location. Up to 28 18m (60fts) rails can be loaded and distributed in any one run.

Using the same system that is used to collect scrap or transport new rails, continuously welded rail (CWR) of lengths from 3m to 200m of rail can be loaded, transported any distance, in gauge under live Overhead Line Equipment, if necessary and unloaded at the desired location.

- Safe controlled lifting of scrap rail, maximising output while minimising risk of damage.
- Approved to work under live Overhead Line Equipment.
- Suitable for delivery or removal of all rail profiles, switch rails and crossings.
- Approved to work Adjacent Line Open.
- Any length of rail from 15ft to 709ft can be transported any distance, in gauge.





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About Unipart Group Australia

Unipart Group Australia is part of Unipart Group a leading manufacturer, full service logistics provider and consultant in operational excellence. Operating across a range of market sectors, Unipart offers a breadth of services to a wide range of blue chip clients internationally.

Unipart Rail, a division of Unipart Group, is a leading specialist provider of technology and supply chain solutions for the rail industry; with expertise in infrastructure, signalling and traction and rolling stock products.





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