McCulloch Rail Panel Lifter System

from Unipart Rail

Revolutionising the method of removing and replacing rail panels



Variable track width allowing access and use in narrow environments

14.6 tonne lifting capability

Approved for use in the UK, US, Canada, New Zealand, Australia and Malaysia

For use on single line and multiple track layouts





Rail movement and track construction made easier

Unipart Rail and McCulloch Rail have formed an alliance, enabling worldwide rail track maintenance and construction projects to be completed in less time with reduced operational costs by the use of innovative rail handling and movement equipment.

Established in 1992, McCulloch Rail are specialists in railroad solutions, providing a range of unique machines for rail sleeper (ties) and panel removal and installation that eliminate manual handling and improves the accuracy and productivity of installations.

The Panel Lifter

Panel lifters are completely remote control, creating an instant exclusion zone and eliminating any handling issues.

The speed of removal is critical during limited possession timescales to enable rework of the track foundation ahead of replacement of the rail and sleepers.

McCulloch Rail have designed and developed the unique Rail **Panel Lifter** system and have been using this system successfully within the UK for 9 years.

The **Panel Lifter** revolutionises the method of removing and placing rail panels swiftly and safely with greater efficiency in comparison to all other methods.

Panel Lifter features & benefits

- 14.6 tonne lifting capability
- Fully certified to work across the rail network including under live Overhead Line Equipment (OLE) and any line open working (ALO)
- A fully loaded Panel Lifter System can turn in any direction whilst in motion
- Variable track width allowing access and use in narrow environments such as bridges, tunnels and cuttings
- Ideal for removing/installing panels on a single line
- · Can easily cross multiple tracks including areas with conductor rails
- Can work with all types of panel
- Compact size and manoeuvrability enables easy transportation, rapid deployment and demobilisation
- A panel lifter system of 2 machines can be used to move panel lengths of up to 90ft (27 metres) long. More machines can be added to move longer panels



Panel Transportation Trailer System

Loading panels onto the transportation trailers allows the site to be cleared as the panels are removed, increasing efficiency and offering a safer handling method.

Panels can be stacked up to four high and each trailer can carry up to 50 tonnes.

740 ft (225m) of old panels can be comfortably removed and loaded in 60 mins, whilst unloading and installation of the same length of track would take 90 minutes.









Panel Lifter Performance Specification

The Panel Lifter, is a diesel powered, hydrostatically driven, remotely operated tracked vehicle with a unique clamp system for handling track panels.

Vehicle Characteristics

- Vehicle Width: 2465mm (retracted), 3865mm (extended)
- Vehicle Height: 2550mm (retracted), 3720mm (extended)
- Base weight of 4.7 tonnes per machine
- Lifting capacity of 7.3 tonnes per machine

- Adjustable beam attachement available to suit any gauge or form of rail
- Fuel capacity 90 litres, sufficiet for 2 x typical
 10 hour shifts

McCulloch Rail Ray

Performance Characteristics

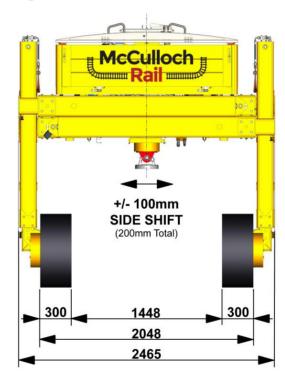
- The Panel Lifter Machines are designed to work in pairs to handle any gauge of track with wooden, concrete or steel sleepers/ties
- Compact size and manoeuvrability enables easy transportation, rapid deployment and demobilisation
- Travels safely at gradients of 11° before alarm setting is enabled
- Can easily cross all types of rail track
- In the event of an engine power failure, the Panel Lifter can be moved off the rail infrastructure utilising the approved recovery system

Compliance

The Panel Lifter is fully approved for use on the UK Rail network by Network Rail and the London Underground network

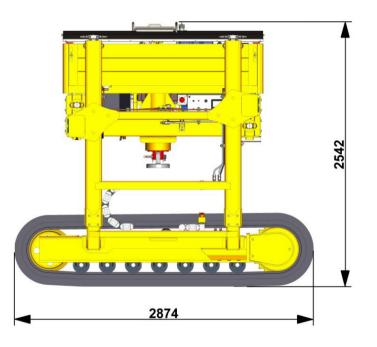
- Can be operated under live OLE when safe working system is in place
- EMC Certified to ISO11452 (Automotive EMC)
- In accordance to The European Derivatives 2002/44/EC Occupational Vibrations Directive Hand Arm vibration system is not applicable as operated by a remote control
- The control of noise at work regulation 2005 Noise Level at operators ear 76 dB (A) engine idle / 84 dB (A) engine full at a IM radius
- EU Stage V US, Tier 4 Final compliant engine limits emmissions exposure
- Independent operator control ensures social distancing

Physical Dimensions



Reference	Retracted	Extended
Track Gap	1488mm	2800mm
Vehicle Width	2465mm	3865mm
Vehicle Height	2550mm	3720mm
Track Width	300mm	300mm
Track Height	670mm	670mm
Track Length	2855mm	2855mm

Reference	Weight
Machine Tare Weight	4.7T
Gross Vehicle Weight	12.0T
Main Ram S.W.L	7.3T



Reference	Travel
Leg Vertical Travel	II50mm
Leg Horizontal Travel	1400mm
Main Ram Horizontal Travel	±125mm
Main Ram Vertical Travel	750mm

Reference	Capacity
Diesel Fuel Capacity	100L
Hydraulic Tank Capacity	200L
Engine Oil Capacity	9.5L
Engine Coolant Capacity	8.0L





About Unipart

The Unipart Group is a leading UK manufacturer, full service logistics provider and consultant in operational excellence. Operating across a range of market sectors, including automotive, manufacturing, mobile telecoms, rail, retail and technology, Unipart offers a breadth of services to a wide range of blue chip clients internationally.

