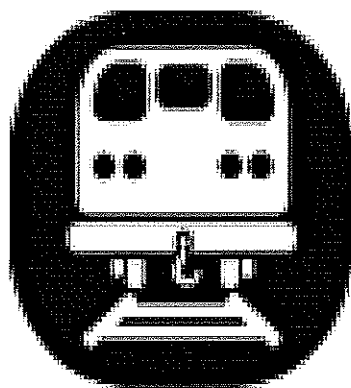




Tube Lines



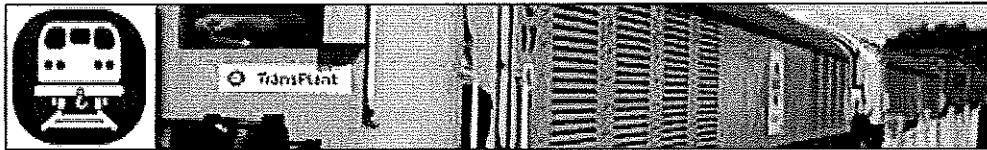
TRANSPLANT

ENGINEERS VEHICLES &

ON-TRACK PLANT

CATALOGUE

ABOUT US



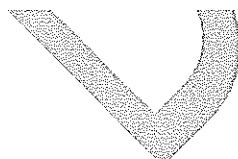
Trans Plant provides specialist engineering trains, purpose built to work anywhere on the London Underground network

Our aim is to ensure that all your equipment and materials are delivered and collected on time, whether to or from station platforms or track sites. We are full appreciative of the limited working hours available to you. Our trains leave depots on time, often following the last passenger train, ensuring your engineering hours are maximised.

TransPlant provides engineer's trains and on-track plant to support the company's maintenance and renewal obligations. It also carries out work for London Underground (Metronet), as well as some third parties off the Underground network.

It owns more than 270 vehicles, including battery and diesel locomotives, rail cranes, tamping machines and a large fleet of wagons – some with specialist mechanical handling equipment. The team's own train operators have the necessary skills to drive these vehicles on the operational railway.

Both routine preventative and 'casualty' maintenance are carried out in-house and can include mechanical, electrical hydraulic, pneumatic, body making and painting skills. Rail Operations is also responsible for developing new technology and modifying existing assets to improve their capability, reliability and effectiveness.



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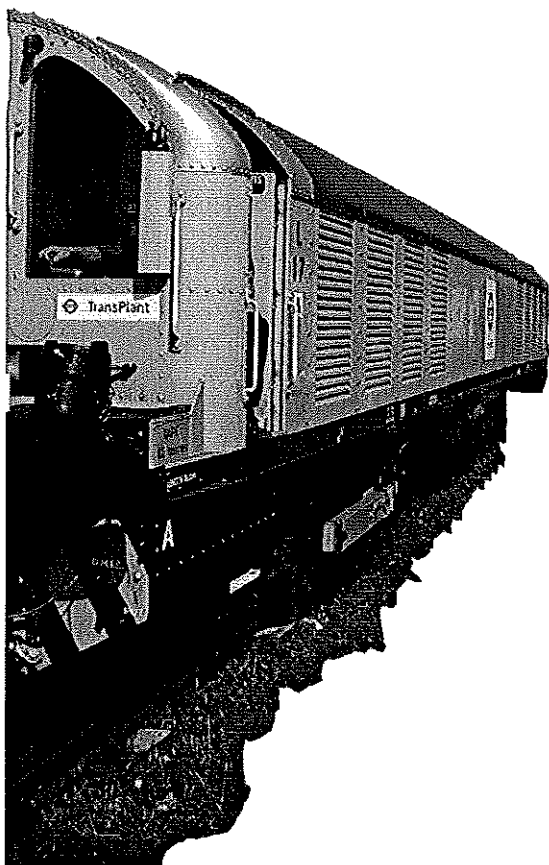
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DRAFT

Information contained in this document also includes the time taken to perform several routine tasks. It should be noted this does not include the setting up and stowing away time of the relevant items of plant.

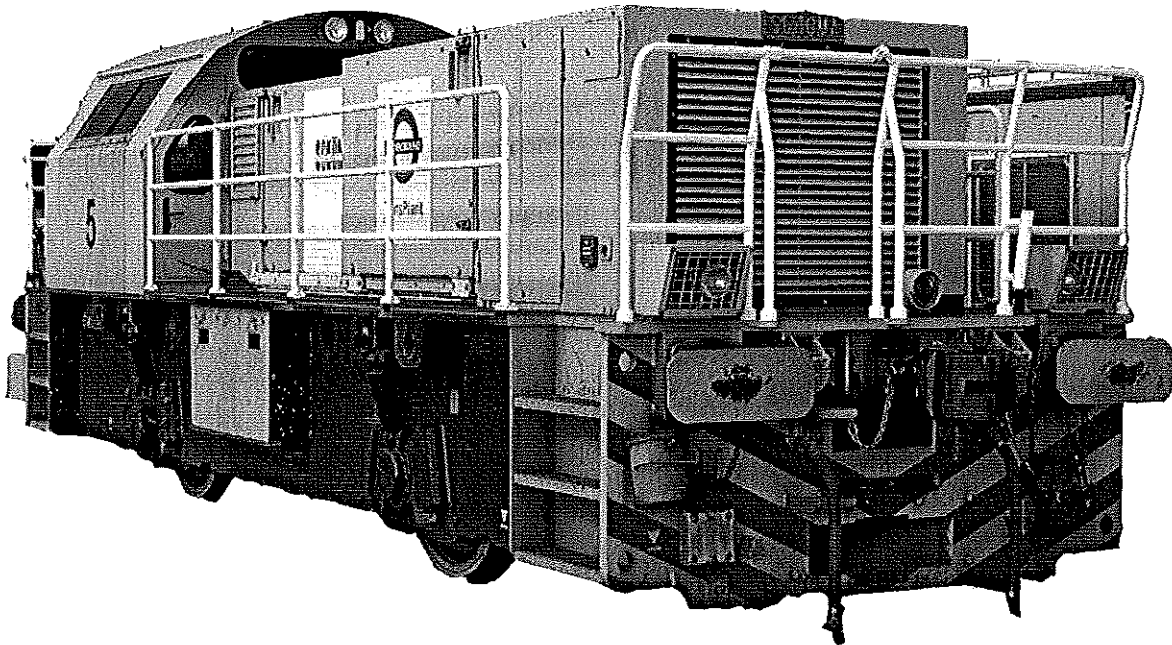
The timings stated are for guidance only; many additional factors/problems can reduce the anticipated working time available at any work site.



BATTERY LOCOMOTIVES

Vehicle Type:	1964/1969 Metro Cammell, and 1973 Brel Doncaster, Battery Locomotives
Quantity Available:	29
Tare:	58 Tonnes
Gross Weight:	58 Tonnes
Payload:	N/A
Coupling Type:	Buckeye + Wedgelock (low-level) + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	General haulage over entire network. 18 fitted with Central Line ATP 6 fitted with Victoria Line ATP 18 fitted with Jubilee Line TBTC
Bogie & Axle Centres:	9.45m & 1.98m
Overall Length:	16.96m (over extended buffers)

DIESEL LOCOMOTIVES

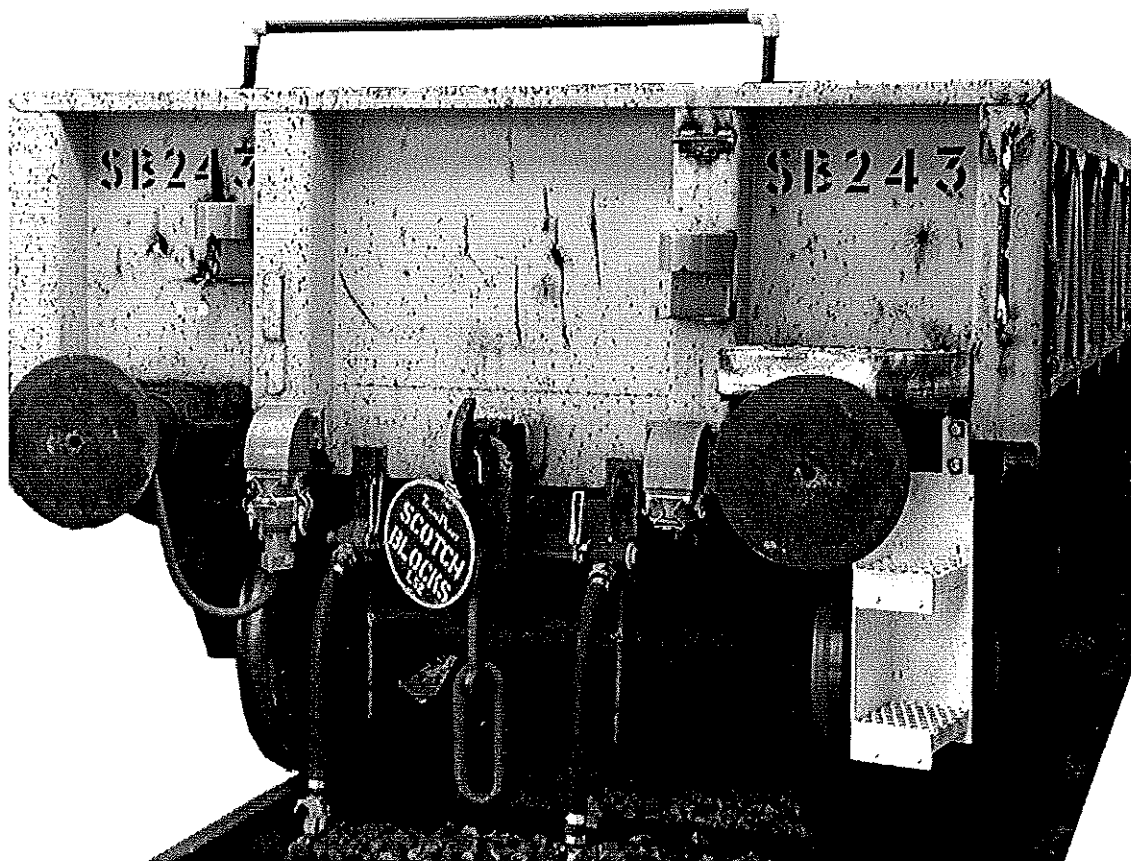


Vehicle Type:	Schoma (1995) CFL-500VR Diesel Locomotive
Quantity Available:	14
Tare:	35 Tonnes
Gross Weight:	35 Tonnes
Payload:	N/A
Coupling Type:	Buckeye + Wedgelock (low-level) + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	General haulage over entire network. All fitted with Jubilee Line TBTC.
Axle Centre:	3.50m
Overall Length:	8.50m (over buffers)

UNIMOGS



Vehicle Type:	UNIMOG Multi Purpose Machine
Quantity Available:	2
Tare:	7.25 Tonnes
Gross Weight:	7.25 Tonnes
Payload:	Hauling 200 Tonnes (4 wagons)
Coupling Type:	Buckeye
Gauge:	LG1 (with wing mirrors pushed in)
Operating Capabilities:	A road-rail vehicle. Primarily designed for depot shunting and wagon hauling, however is multi purpose.
Overall Length:	4.60m

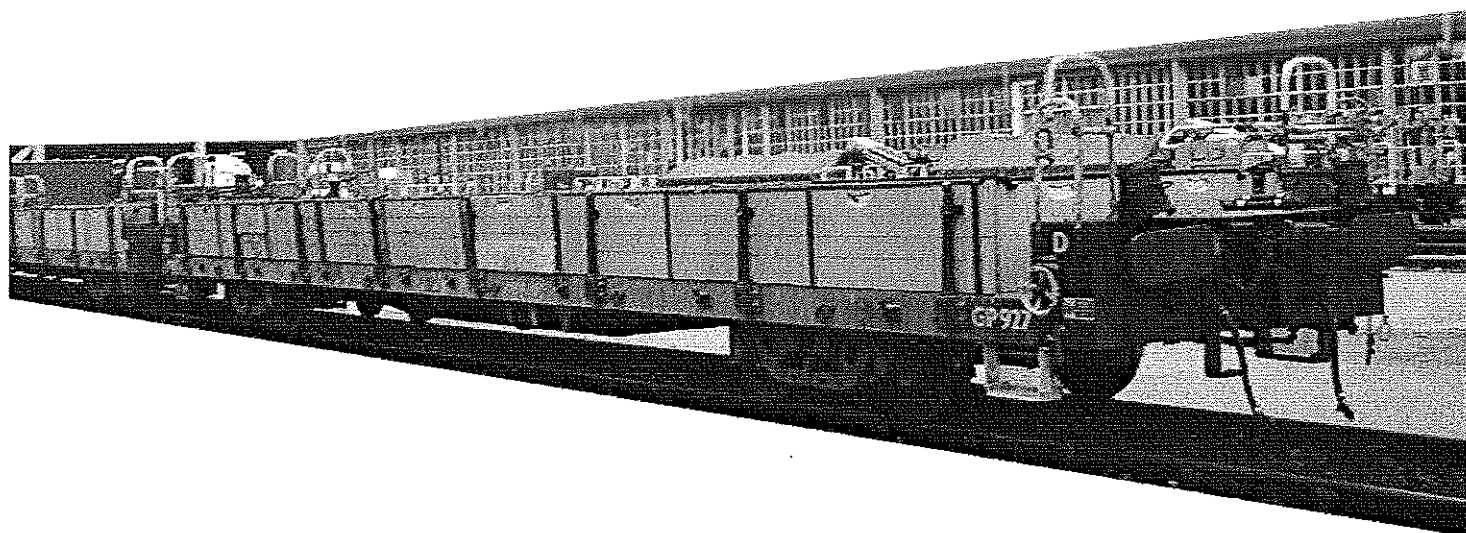


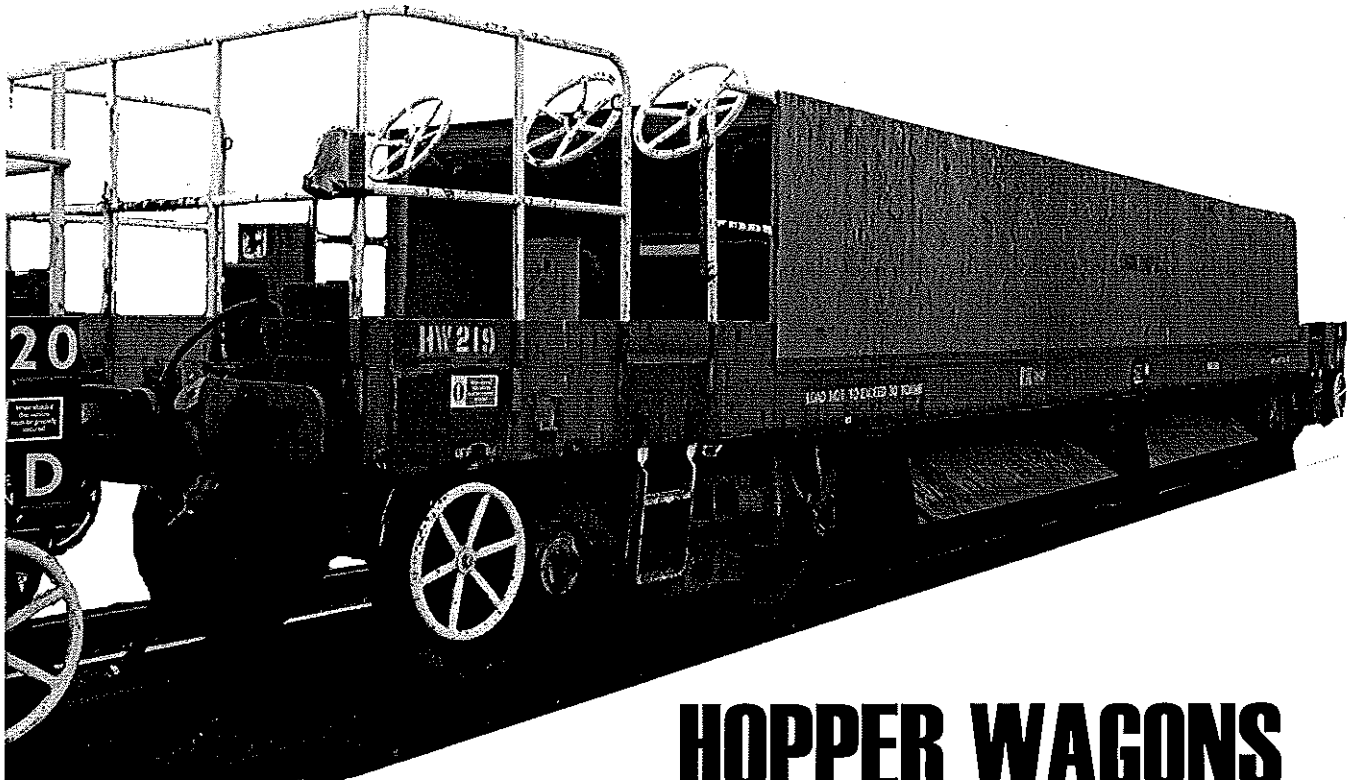
SPOIL & BALLAST WAGONS

Vehicle Type:	Spoil & Ballast Wagon (ex BR "Turbot" wagons)
Quantity Available:	60
Tare:	14 Tonnes
Gross Weight:	48 Tonnes
Payload:	34 Tonnes
➤ Type:	Various
Coupling Type:	Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	For carrying spoil, ballast and other track maintenance and renewal materials.
Bogie & Axle Centres:	6.86m & 1.75m
Overall Length:	10.82m (over buffers)

GENERAL PURPOSE WAGONS

Vehicle Type:	General Purpose Wagon
Quantity Available:	45
Tare:	19 Tonnes
Gross Weight:	49 Tonnes
Payload:	30 Tonnes
➤ Type:	General Purpose - Ballast, spoil, sleepers, bags, etc.
➤ Quantity:	105 concrete sleepers, 120 wooden sleepers (70 with chairs), 22 pallets (30 25kg bags per pallet).
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Transportation of general engineering materials.
Bogie & Axle Centres:	10.20m & 1.45m
Overall Length:	16.33m (over buffers)

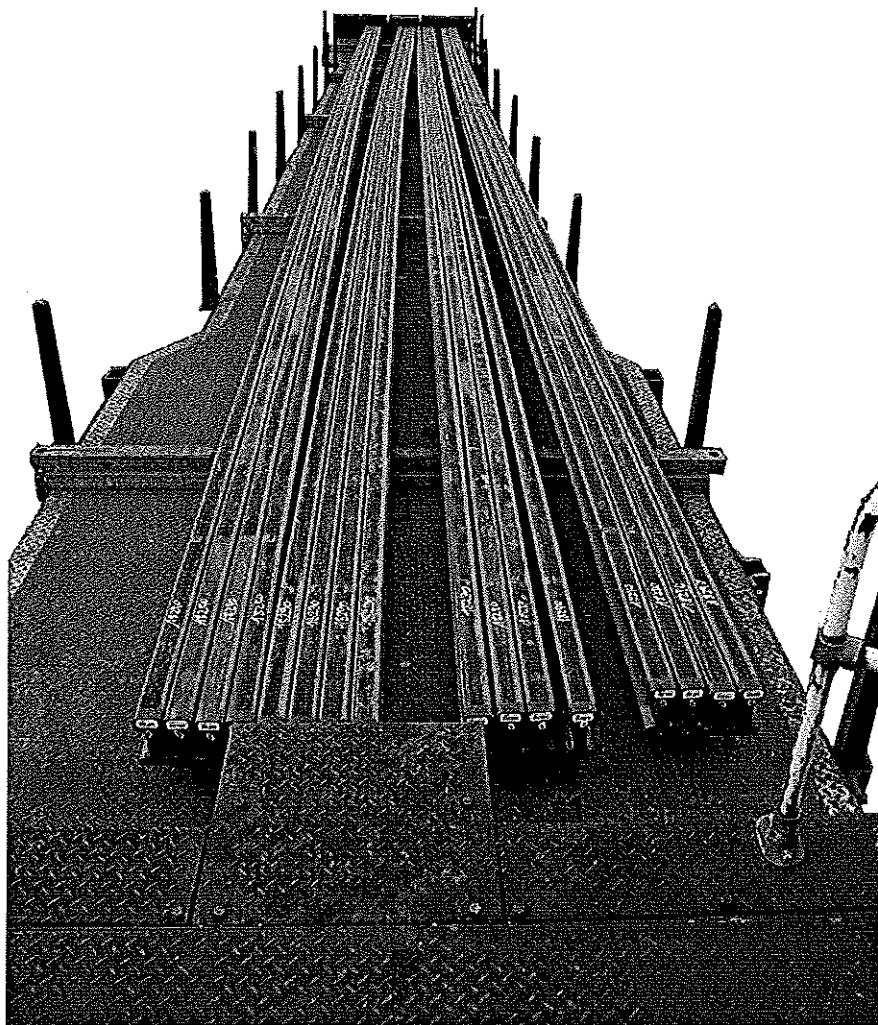




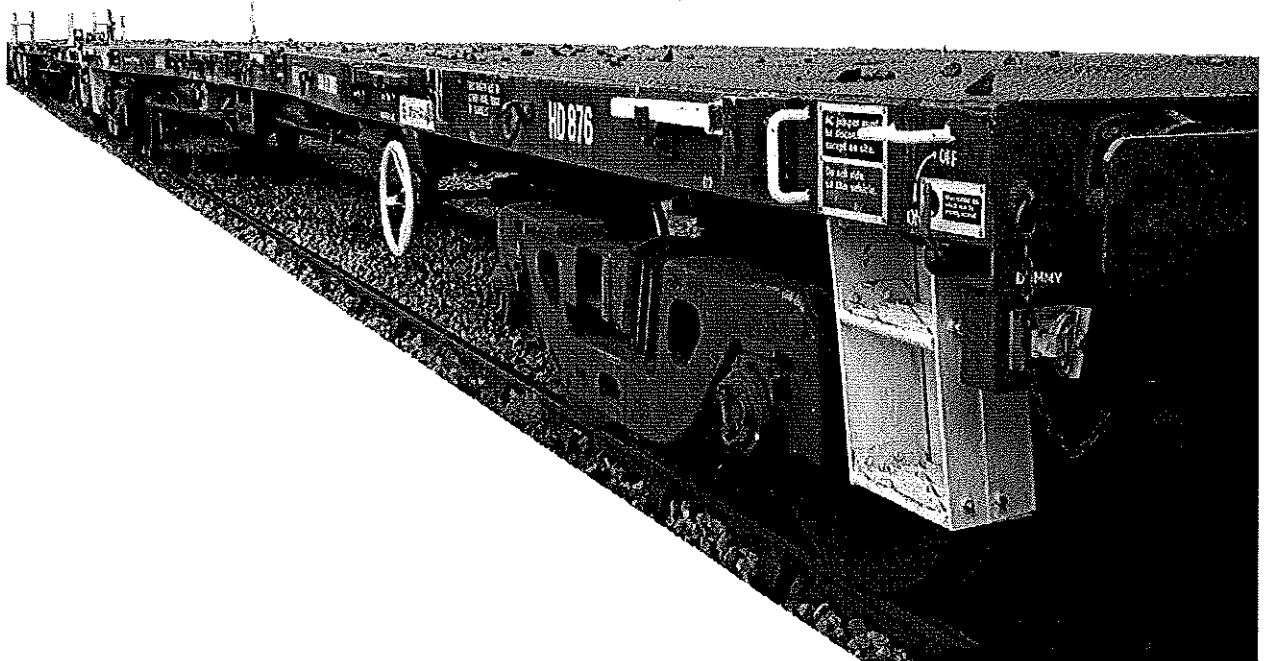
HOPPER WAGONS

Vehicle Type:	Hopper Wagon
Quantity Available:	22
Tare:	22.5 Tonnes
Gross Weight:	52.5 Tonnes
Payload:	30 Tonnes
➤ Type:	Granular Materials
➤ Volume:	18.8m ³
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Delivering and positioning of (primarily) track ballast, Shingle and other granular materials can be carried.
Bogie & Axle Centres:	9.40m & 1.75m
Overall Length:	12.90m (over headstocks)
Timings:	Controlled discharge of a wagon full of ballast should take approximately 5min.

Vehicle Type:	Rail Wagon	RAIL WAGONS
Quantity Available:	10	
Tare:	18 Tonnes	
Gross Weight:	38 Tonnes	
Payload:	20 Tonnes	
➤ Type:	18.3m Lengths of any rail type	
➤ Quantity:	18 flat bottom or 22 bullhead rails	
Coupling Type:	8 x Buckeye, 2 x Drawhook & Side Buffers	
Gauge:	LG1	
Operating Capabilities:	Transporting rail. 2 wagons have the capability to load and unload rail over ends.	
Bogie & Axle Centres:	15.24m & 1.52m	
Overall Length:	20.71m (over buffers)	



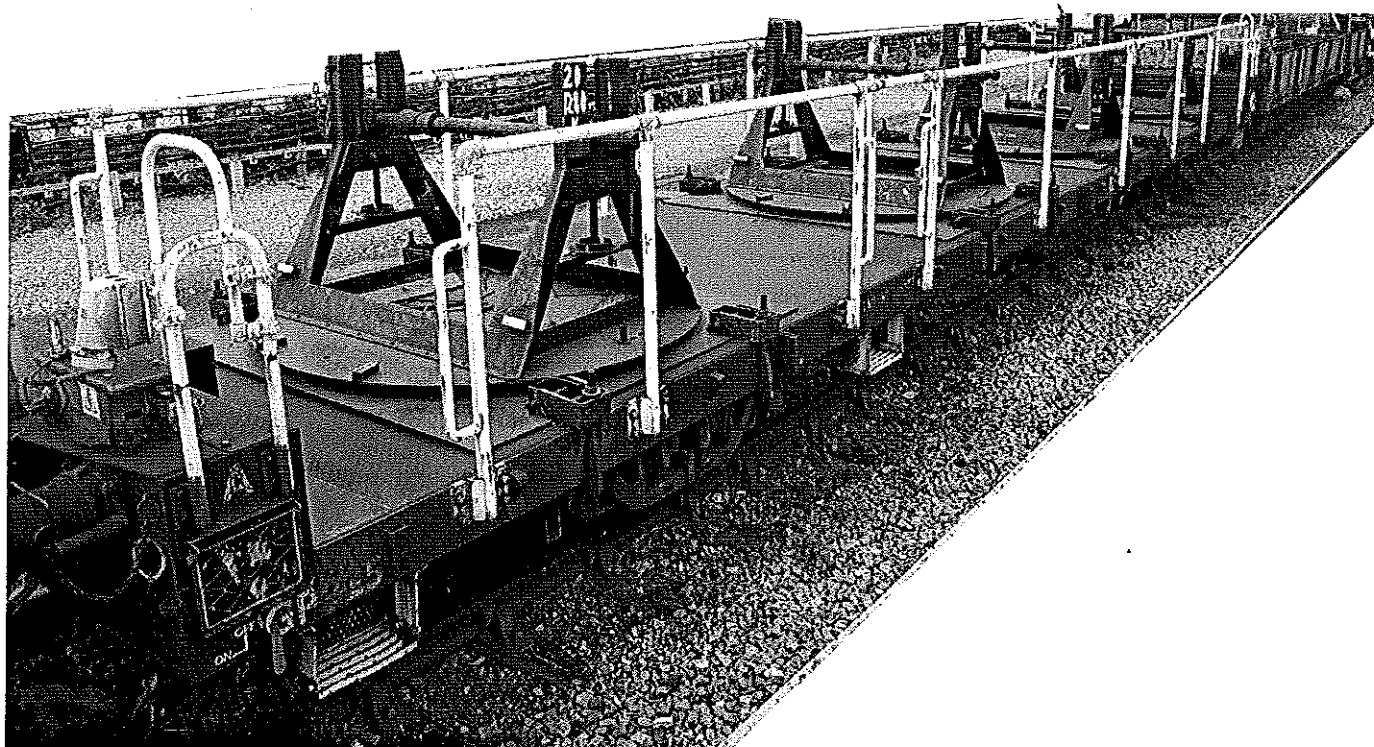
HIGH DECK WAGONS



Vehicle Type:	High Deck Bogie Rail Wagon
Quantity Available:	6
Tare:	22.5 Tonnes
Gross Weight:	58.5 Tonnes
Payload:	35 Tonnes
➤ Type:	Track Panels
➤ Quantity:	4 (maximum)
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Designed to safely transport up to 4 track panels. Can also be used to transport other general loads.
Bogie & Axle Centres:	14.60m & 1.75m
Overall Length:	19.53m (over buffers)

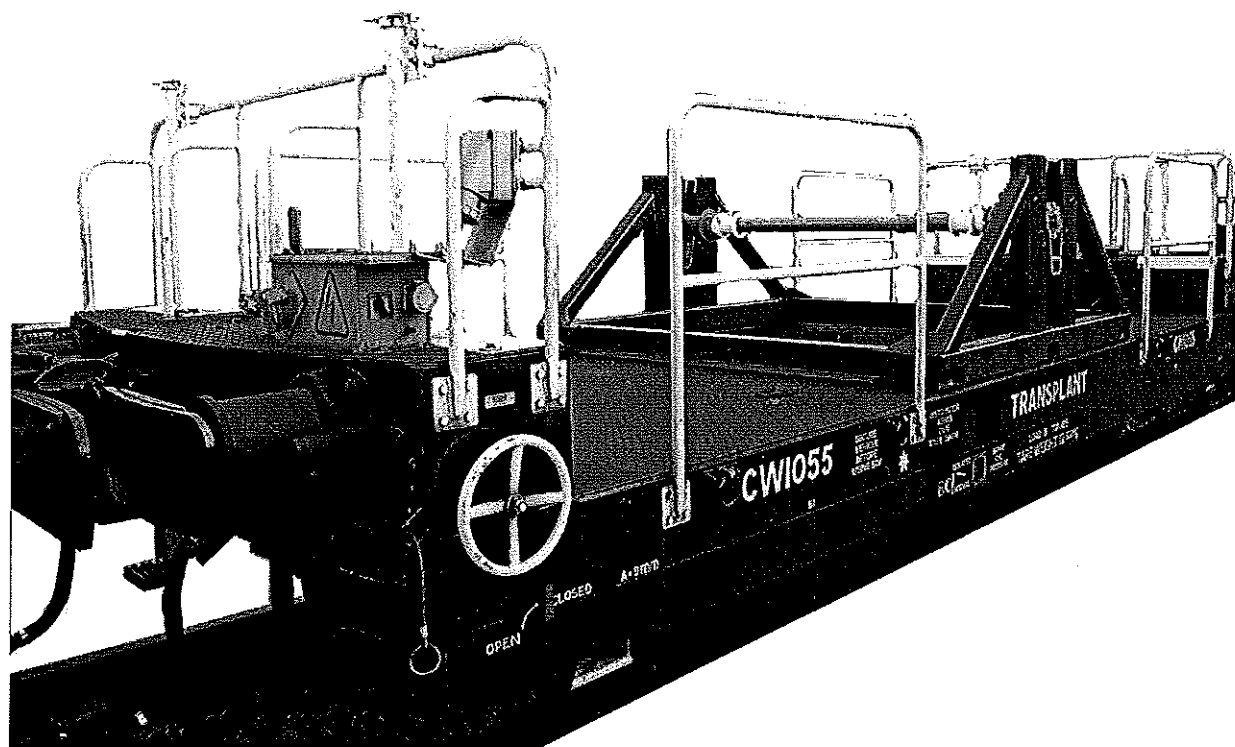
CABLE WAGONS

Vehicle Type:	4 Way Cable Turntables
Quantity Available:	4 (4 turntables per GP wagon)
Tare:	19 Tonnes
Gross Weight:	49 Tonnes
Payload:	30 Tonnes
➤ Type:	7.5T Maximum weight per drum (4 drums)
➤ Diameter:	1830mm (maximum drum)
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Reeling off cables whilst travelling.
Bogie & Axle Centres:	10.20m & 1.45m
Overall Length:	16.33m (over buffers)

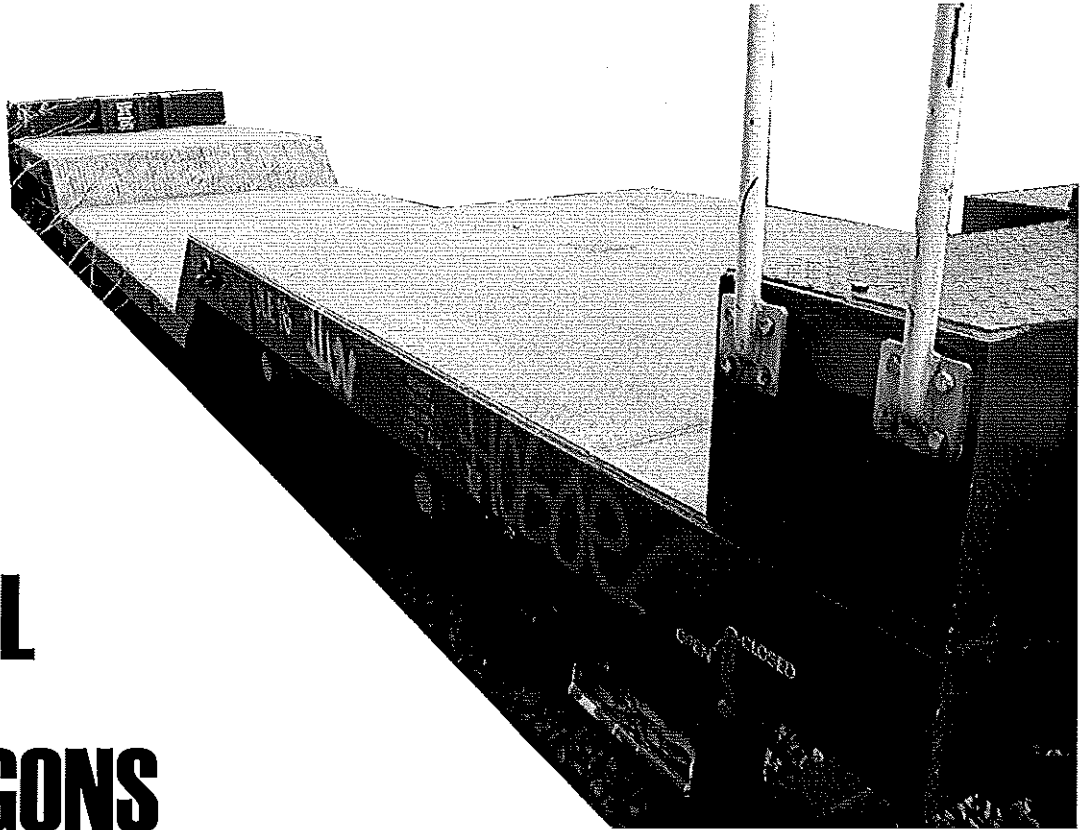


CABLE WELL WAGONS

Vehicle Type:	Deep Well Cable Drum Wagon
Quantity Available:	7
Tare:	10 Tonnes
Gross Weight:	16.5 Tonnes
Payload:	6.5 Tonnes
➤ Type:	Cables wound on wooden drums
➤ Diameter:	2300mm (maximum drum size)
Coupling Type:	3 x Ward, 4 x Buckeye + Drawhook & Side Buffers (on both types)
Gauge:	LG1
Operating Capabilities:	To transport cables to and from site, and to reel off on site.
Axle Centre:	3 x 3.81m, 4 x 4.00m
Overall Length:	3 x 5.55m, 4 x 7.00m (both types over headstock)



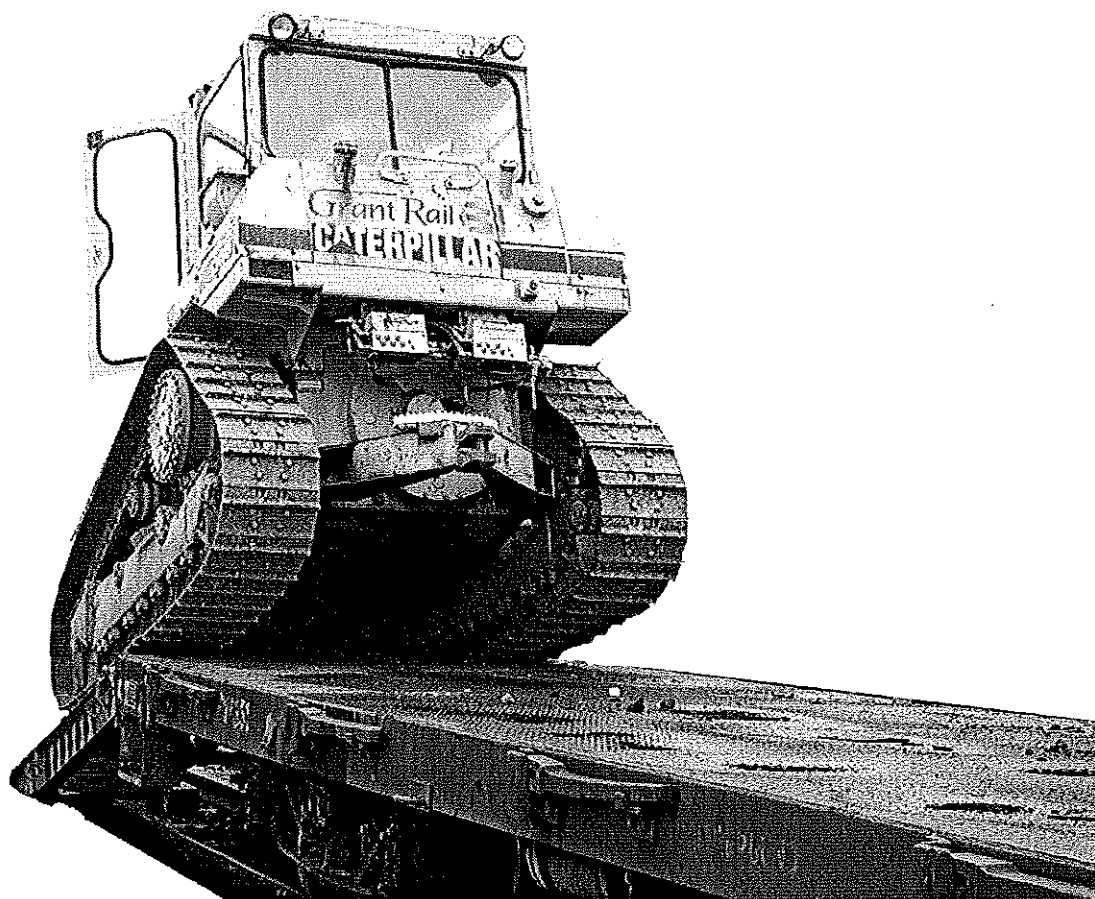
WELL WAGONS



Vehicle Type:	Bogie Well Wagon
Quantity Available:	4
Tare:	10 Tonnes
Gross Weight:	24 Tonnes
Payload:	10-14 Tonnes
➤ Type:	General Purpose - Maximum weight in well 10T, 14T evenly distributed across wagon deck.
Coupling Type:	Buckeye
Gauge:	LG1
Operating Capabilities:	Well provides ability to transport larger objects that would normally fit in given gauge.
Bogie & Axle Centres:	7.20m & 1.45m
Overall Length:	12.00m (over headstocks)

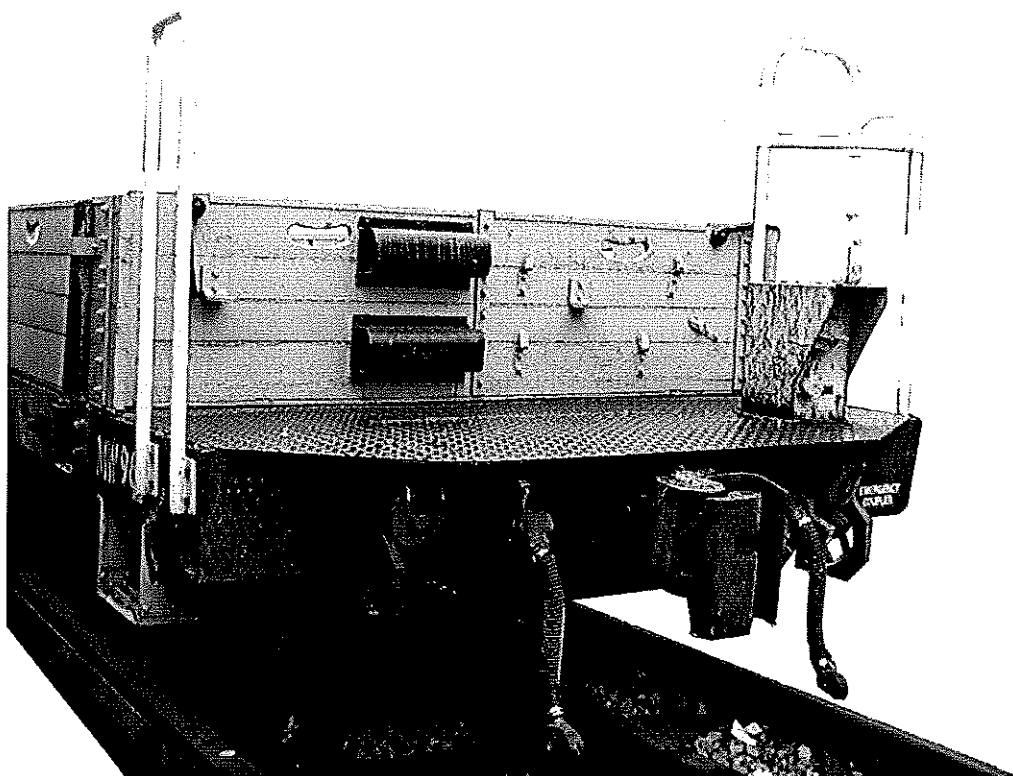
FLAT WAGONS

Vehicle Type:	Implement Flat Wagon
Quantity Available:	3
Tare:	18.5 Tonnes
Gross Weight:	48.5 Tonnes
Payload:	30 Tonnes
➤ Type:	Various
Coupling Type:	Ward (low-level at one end) + Drawhook & Side Buffers (only present at coupling A end)
Gauge:	LG1
Operating Capabilities:	Carrying of various items of large plant equipment and materials.
Bogie & Axle Centres:	10.21m & 1.52m
Overall Length:	16.03m (over buffers)

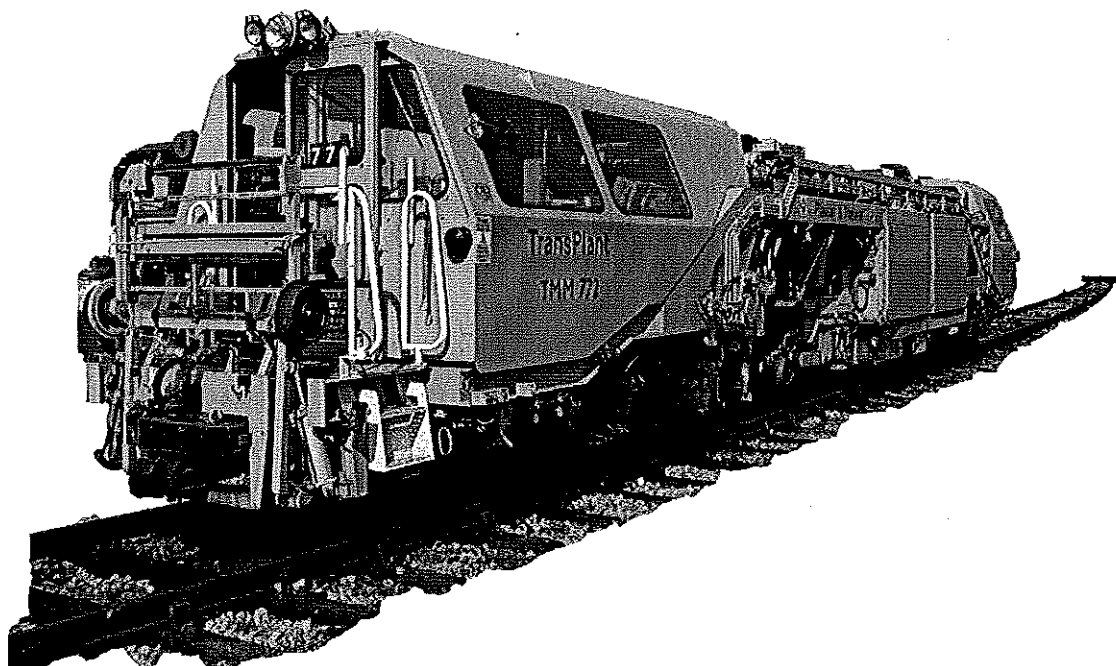


MATCH WAGONS

Vehicle Type:	Mixer Match Wagon
Quantity Available:	4
Tare:	18 Tonnes
Gross Weight:	48 Tonnes
Payload:	30 Tonnes
➤ Type:	Various
Coupling Type:	Buckeye (low-level at one end)
Gauge:	LG1
Operating Capabilities:	Carrying of various items of large plant equipment and materials. Also can be used for general purpose duties.
Bogie & Axle Centres:	10.20m & 1.45m
Overall Length:	16.33m (over buffers)

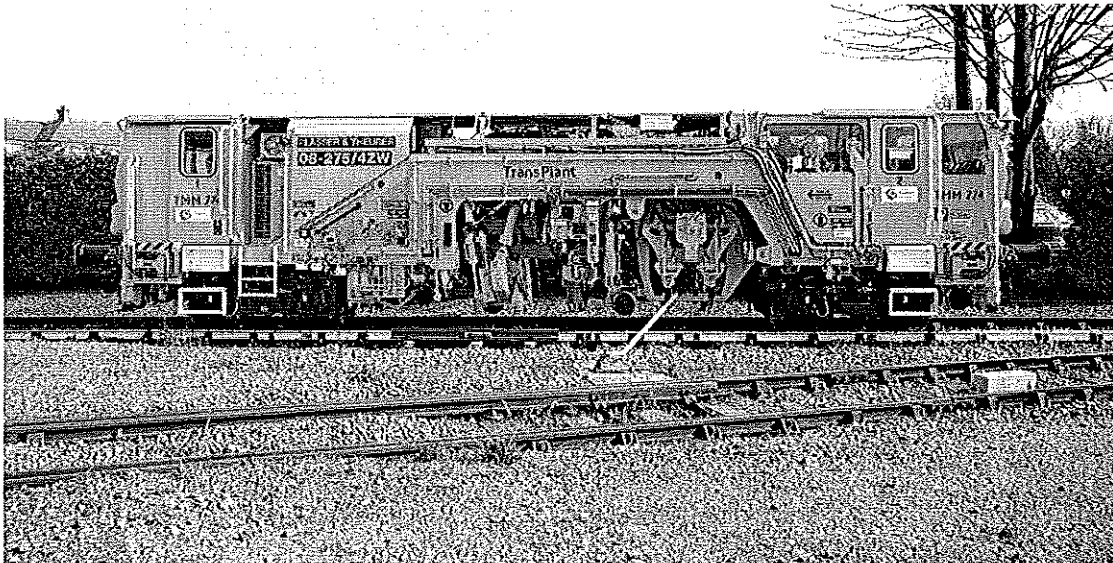


PLAIN LINE TAMPER



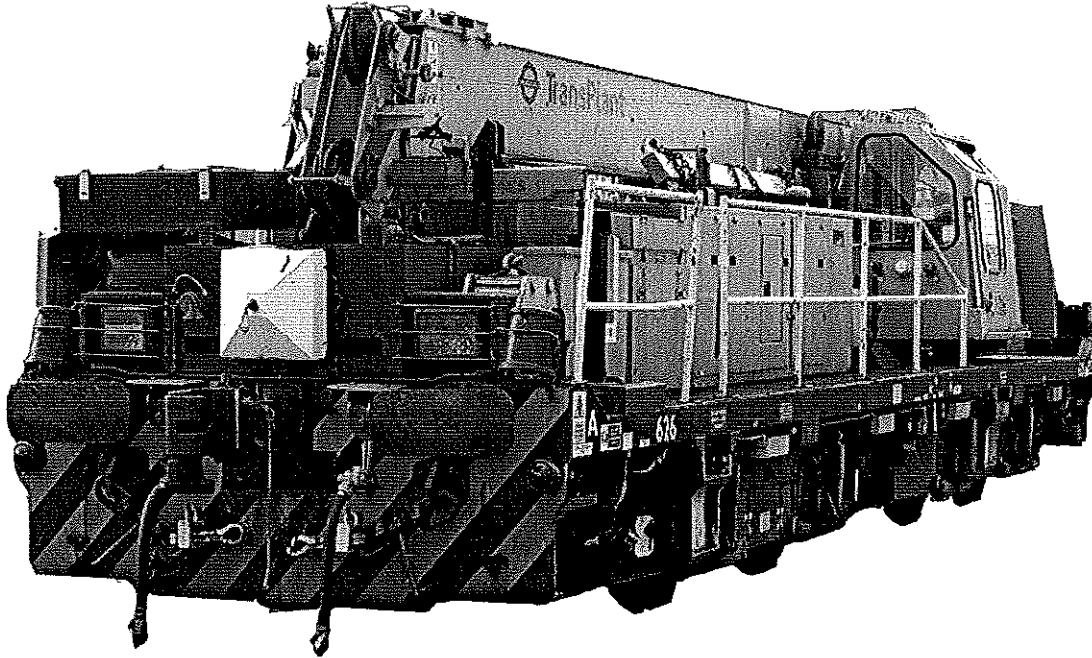
Vehicle Type:	Plasser & Theurer Plain Line Tamping Machine Model: PU07-16
Quantity Available:	3
Tare:	40 Tonnes
Gross Weight:	40 Tonnes
Payload:	N/A
Coupling Type:	Buckeye + Wedgelock (low-level)
Gauge:	LG1
Operating Capabilities:	Plane line tamping only, of all underground lines. Can travel independently or in train formation, in traffic hours.
Bogie & Axle Centres:	11.00m & 1.30m
Overall Length:	19.60m (over extended buffers)
Timings:	Track can be fully tamped and aligned at a rate of a minimum of 250m/hr.

P&C TAMPER



Vehicle Type:	Plasser & Theurer Points and Crossing (P&C) Tamping Machine Model: 08-275/4ZW
Quantity Available:	1
Tare:	40 Tonnes
Gross Weight:	40 Tonnes
Payload:	N/A
Coupling Type:	Drawhook & Side Buffers
Gauge:	LG2
Operating Capabilities:	Plane line and P&C tamping of all Sub-Surface lines and outdoor sections of Deep Level Tube lines.
Bogie & Axle Centres:	8.00m & 1.30m
Overall Length:	13.24m (over buffers)
Timings:	The machine can tamp and align plane line track at a minimum rate of 250m/hr. The completion of the tamp and alignment of an item of P&C work will depend on numerous factors.

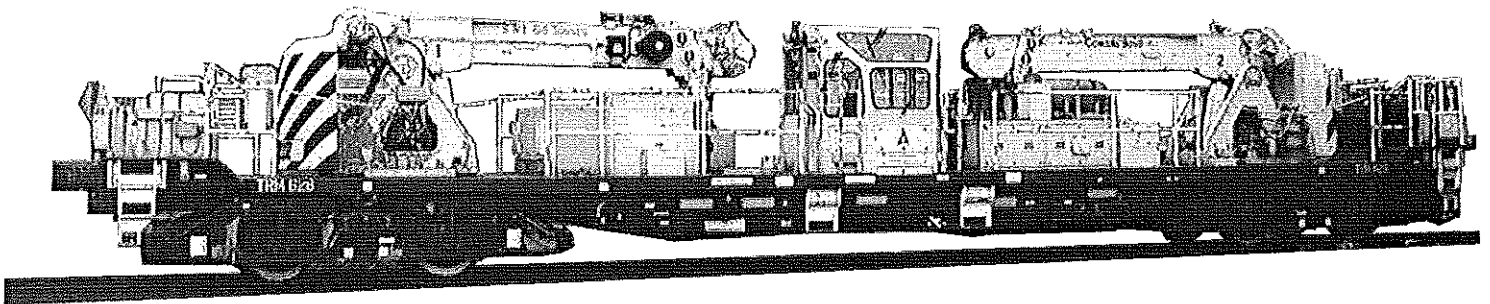
7.5T RAIL CRANES



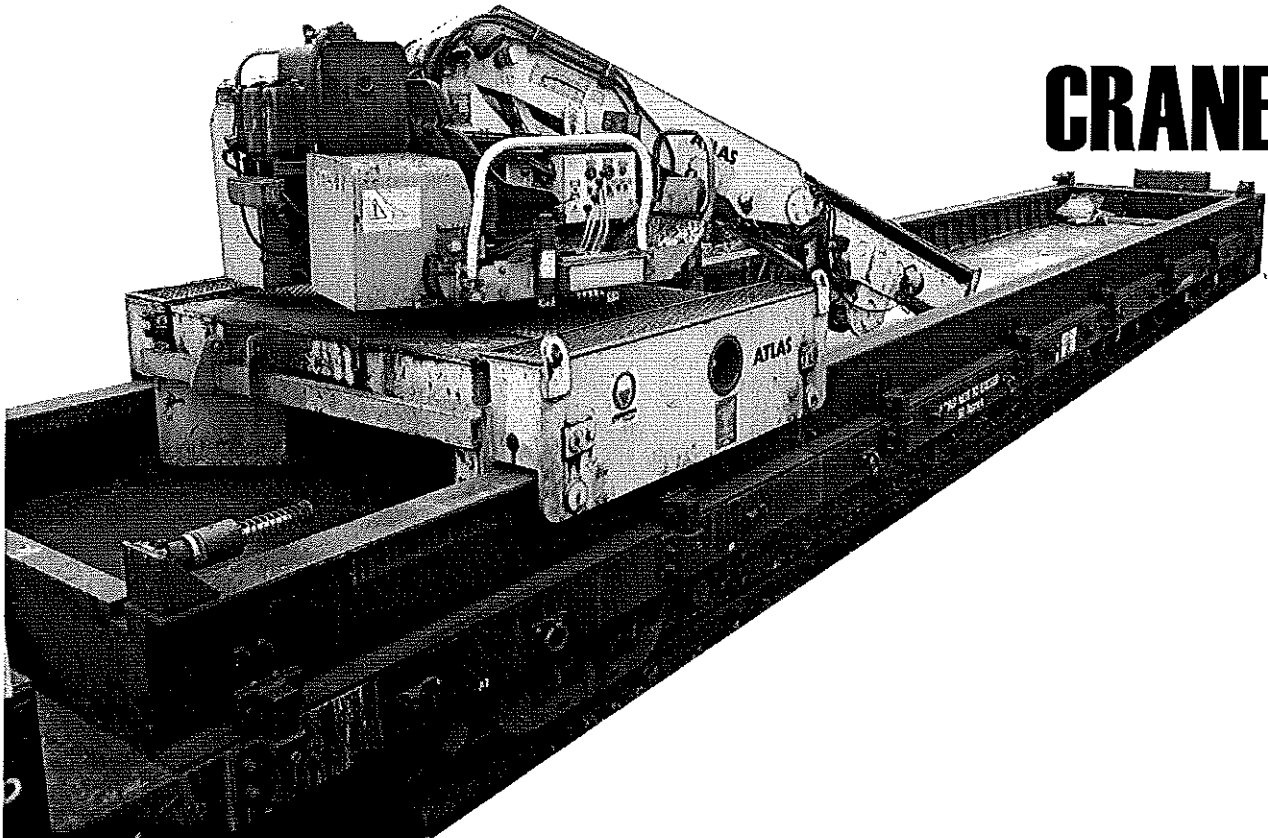
Vehicle Type:	NEI (Clarke-Chapman) 7.5 Tonne Diesel Hydraulic Rail Crane
Quantity Available:	4
Gross Weight:	64 Tonnes
Lifting Capacity:	See duty charts for full details. <ul style="list-style-type: none">➤ Max: 7.5T at 5m radius (free on wheels)➤ Min: 1T at 12.15m radius (on 150mm cant)
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Handling 18m rails, all types of plant equipment, palletised goods and all other types of materials used in track and infrastructure maintenance.
Bogie & Axle Centres:	4.75m & 1.74m
Overall Length:	11.72m (over buffers)

10T TWIN JIB CRANES

Vehicle Type:	NEI Clarke-Chapman 10 Tonne Twin Jib Track Laying Machine
Quantity Available:	2
Gross Weight:	67 Tonnes
Lifting Capacity:	See duty charts for full details (single jib) <ul style="list-style-type: none">➤ Max (twin jib): 10.0T at 4.5m radius (on level track)➤ Min (twin jib): 4.95T at 6.15m radius (on 150mm cant)
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Designed to lift and travel with track panels. Also able to carry general loads on either or both jibs.
Bogie & Axle Centres:	12.00m & 1.74m
Overall Length:	17.20m (over headstock)



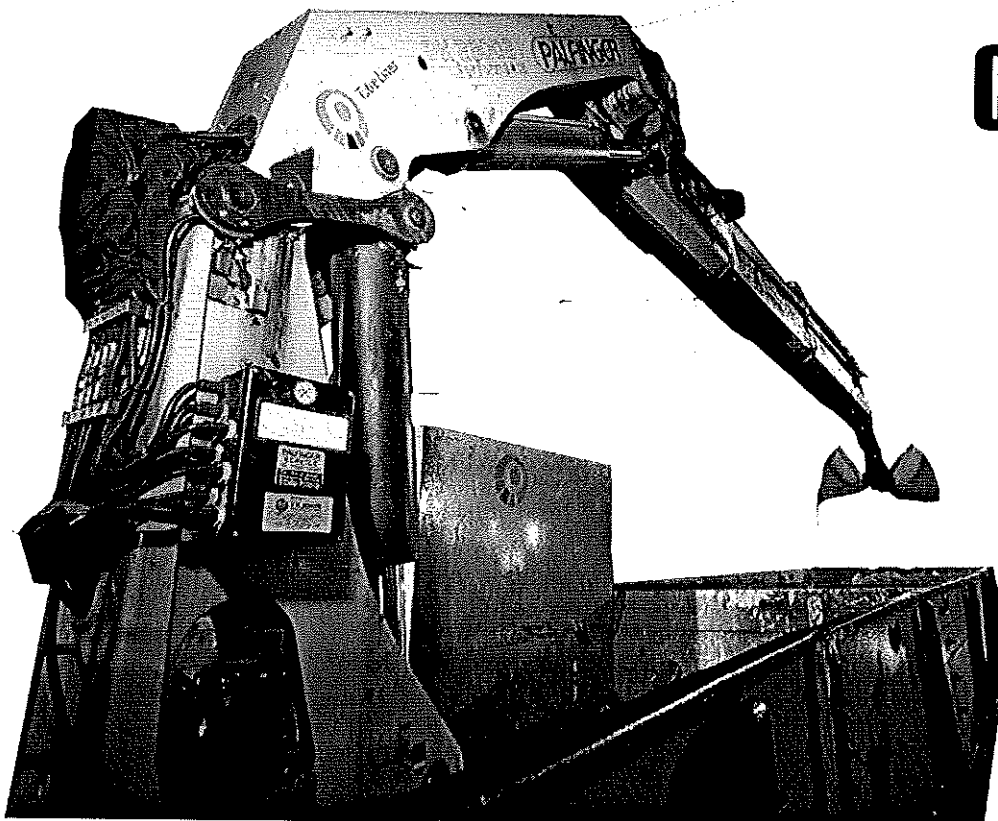
ATLAS ROLLOADER CRANE



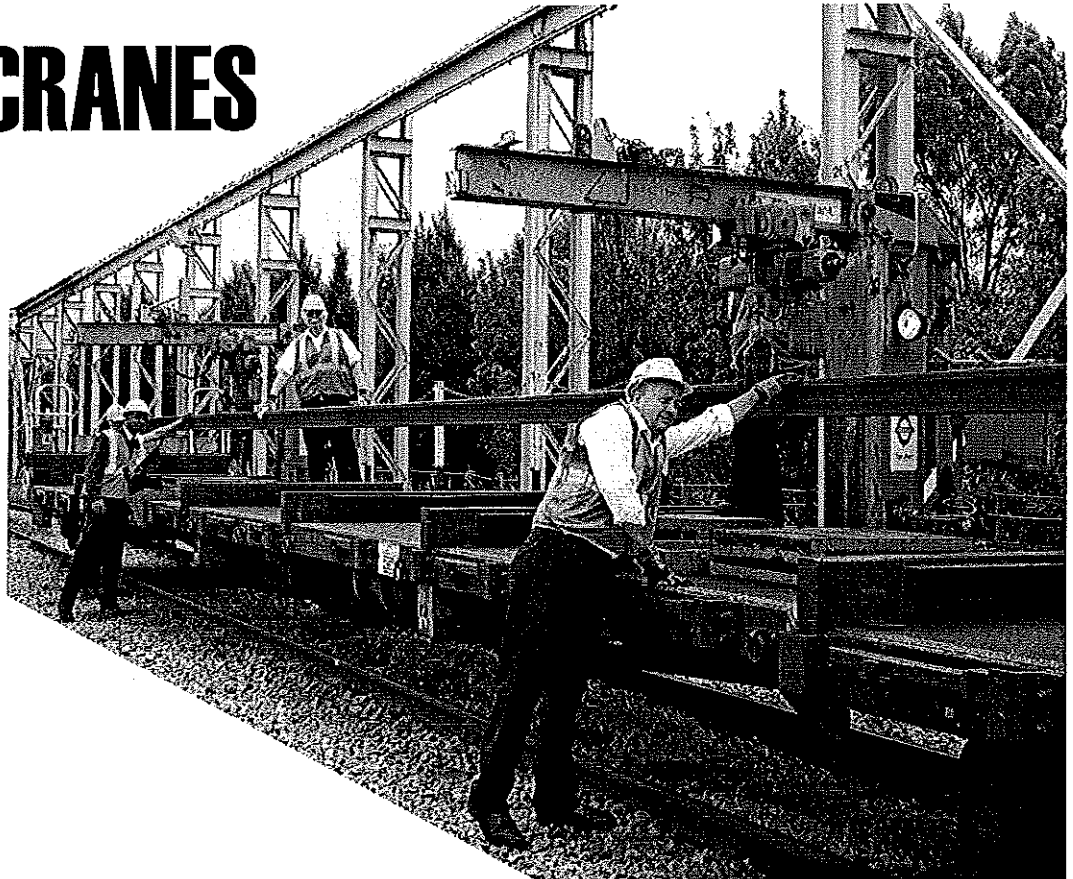
Vehicle Type:	Atlas Wagon Mounted Roll loader Crane (Mounted on 30T GP wagon)
Quantity Available:	1
Tare:	27 Tonnes
Gross Weight:	49 Tonnes
Payload:	22 Tonnes
Lifting Capacity:	2.9 Tonnes at maximum radius of 7.2
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	To provide a means of handling all types of plant, equipment, palletised goods and all types of material used in track and infrastructure maintenance.
Bogie & Axle Centres:	10.20m & 1.45m
Overall Length:	16.33m (over buffers)

Vehicle Type:	Palfinger Wagon Mounted Crane (Mounted on 30T GP wagon)
Quantity Available:	2
Tare:	29 Tonnes
Gross Weight:	49 Tonnes
Payload:	20 Tonnes
> Type:	Fresh Ballast and General Materials
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Normally used in conjunction with the DISAB Vacuum Loading Machine. Can be used as a General Purpose Crane, if required.
Bogie & Axle Centres:	10.20m & 1.45m
Overall Length:	16.33m (over buffers)

PALFINGER CRANE



ELK CRANES



Vehicle Type:	Wagon Mounted ELK Cranes
Quantity Available:	4 (1 pair per rail wagon)
Tare:	20 Tonnes
Gross Weight:	40 Tonnes
Payload:	18 Tonnes
➤ Type:	18.3m or less lengths of any rail type
Lifting Capacity:	5 Tonnes (2.5T per crane)
Coupling Type:	Buckeye
Gauge:	LG1
Operating Capabilities:	To load/unload 18.3 or shorter lengths of rail to or from the side of the track, close and parallel to running rails.
Bogie & Axle Centres:	15.24m & 1.52m
Overall Length:	20.71m (over buffers)
Timings:	1min to load/unload an 18.3m rail. Train movements between loading points should be accounted for.

END LOADING UNIT

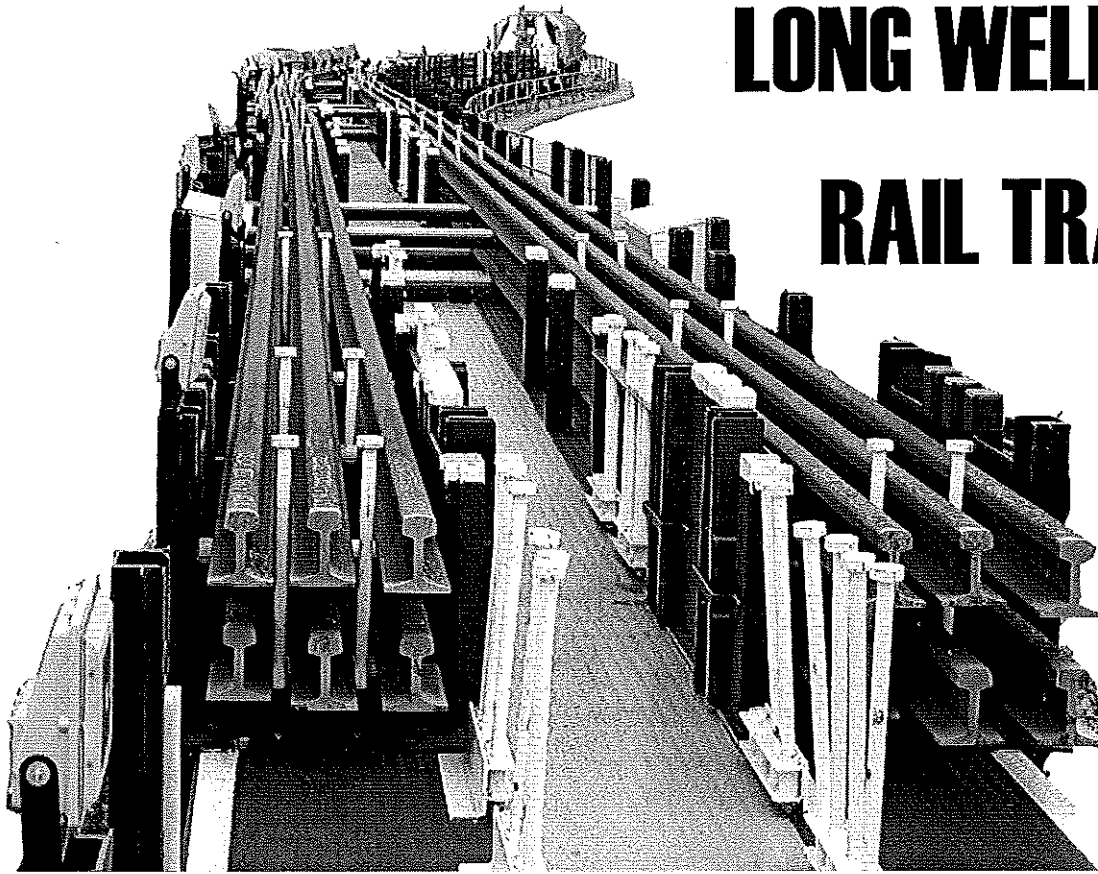
Vehicle Type:	End Loading Unit (ELU) (Mounted on 20T Rail Wagon)
Quantity Available:	5
Tare:	19 Tonnes
Gross Weight:	38 Tonnes
Payload:	19 Tonnes
➤ Type:	Up to 18.3m lengths of any rail type
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	Loading lengths of rail from the 4ft using a winch at the end of the wagon.
Bogie & Axle Centres:	15.24m & 1.52m
Overall Length:	20.71m (over buffers)
Timings:	Up to 2hrs to load 18 normal 18.3m rails (note: this time includes train movements).



SHORT CHUTE WAGON

Vehicle Type:	Short Chute Wagon (Mounted on 20T Rail Wagon)
Quantity Available:	1
Tare:	19 Tonnes
Gross Weight:	38 Tonnes
Payload:	19 Tonnes
➤ Type:	Up to 18.3m lengths of any rail type
➤ Quantity:	18 flat bottom or 21 bullhead rails. Or 80 aluminium conductor rails.
Coupling Type:	Ward
Gauge:	LG1
Operating Capabilities:	Unloading lengths of rail into the 4ft using a short chute at the end of the wagon.
Bogie & Axle Centres:	15.24m & 1.52m
Overall Length:	19.96m (over buffers)
Timings:	1-1.5hrs to unload 18-21 running rails. Up to 2hrs to unload 80 conductor rails.





LONG WELDED RAIL TRAIN

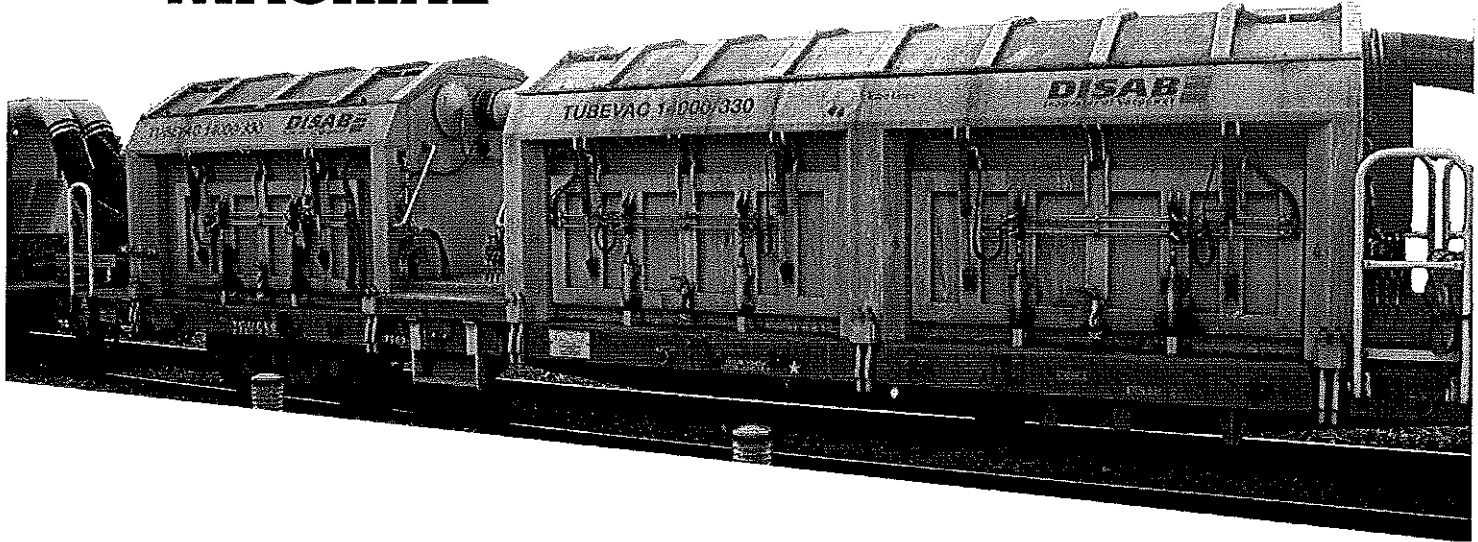
Vehicle Type:	Long Welded Rail Train (LWRT)
Quantity Available:	1 (composed of a single set of 6 modified rail wagons)
Tare:	100 Tonnes
Gross Weight:	200 Tonnes
Payload:	100 Tonnes
➤ Type:	91.5m Lengths of any rail type
➤ Quantity:	12 flat bottom or 16 bullhead rails
Coupling Type:	Buckeye
Gauge:	LG1
Operating Capabilities:	Offloading 2 rails simultaneously via chutes at both ends of the set of wagons.
Overall Length:	105.0m (not including locos)
Timings:	The train is capable of off-loading its entire load within 1.5hrs.

RSDT 06

Vehicle Type:	Rail & Sleeper Delivery Train (RSDT) - TL06
Quantity Available:	1 (Composing of 13 bespoke FEA-S Wagons)
Tare:	266.5 Tonnes
Payload:	1066 Tonnes
➤ Type:	216m Lengths of any rail type, plus concrete sleepers
➤ Quantity:	10 rails and 1470 sleepers
Coupling Type:	Drawhook & Side Buffers
Gauge:	LG2 (with limitations)
Operating Capabilities:	A 13 wagon train able to deliver track materials to site and unload directly adjacent to the track bed. Capacity allows up to 1000m of track to be laid.
Operating Restrictions:	Operation on the LU network only within a Possession, due to length of train.
Bogie & Axle Centres:	xxx
Overall Length:	278.9m (not including locos)
Timings:	3-4hrs to unload 1470 sleepers. 1-2hrs to unload ten 216m rails.

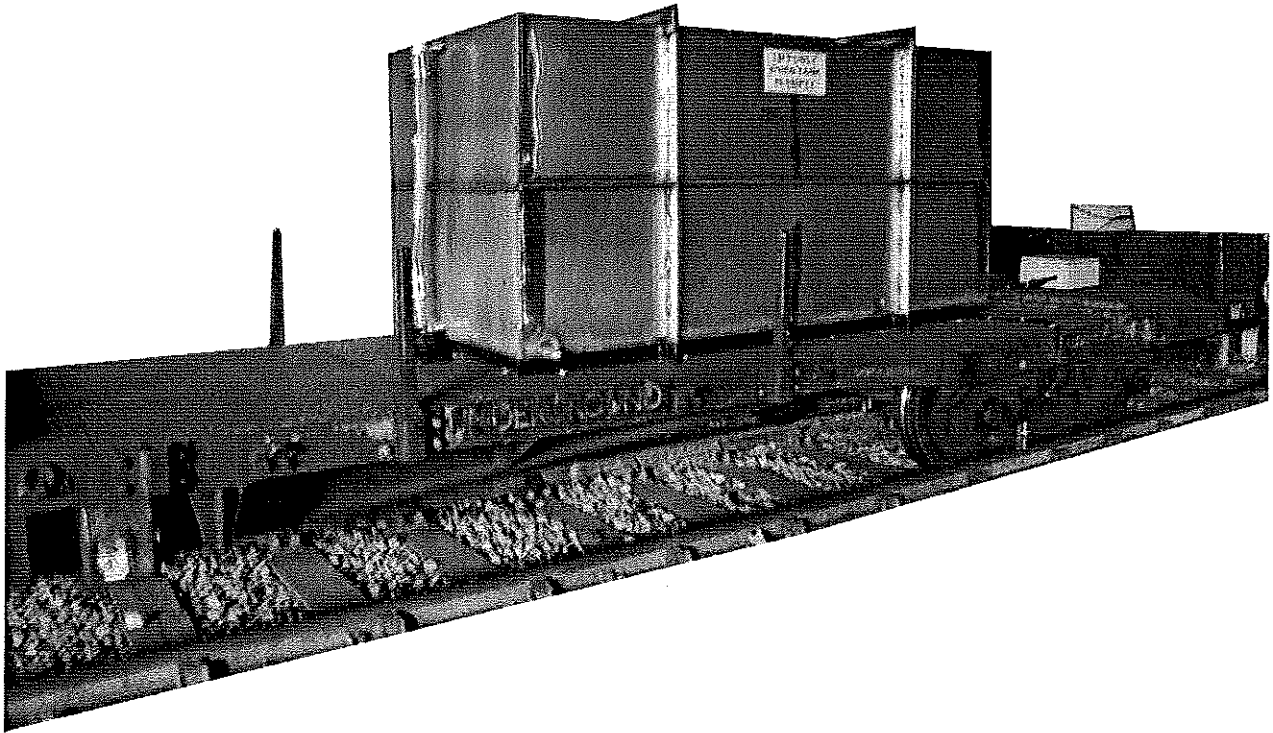


DISAB VACUUM LOADING MACHINE

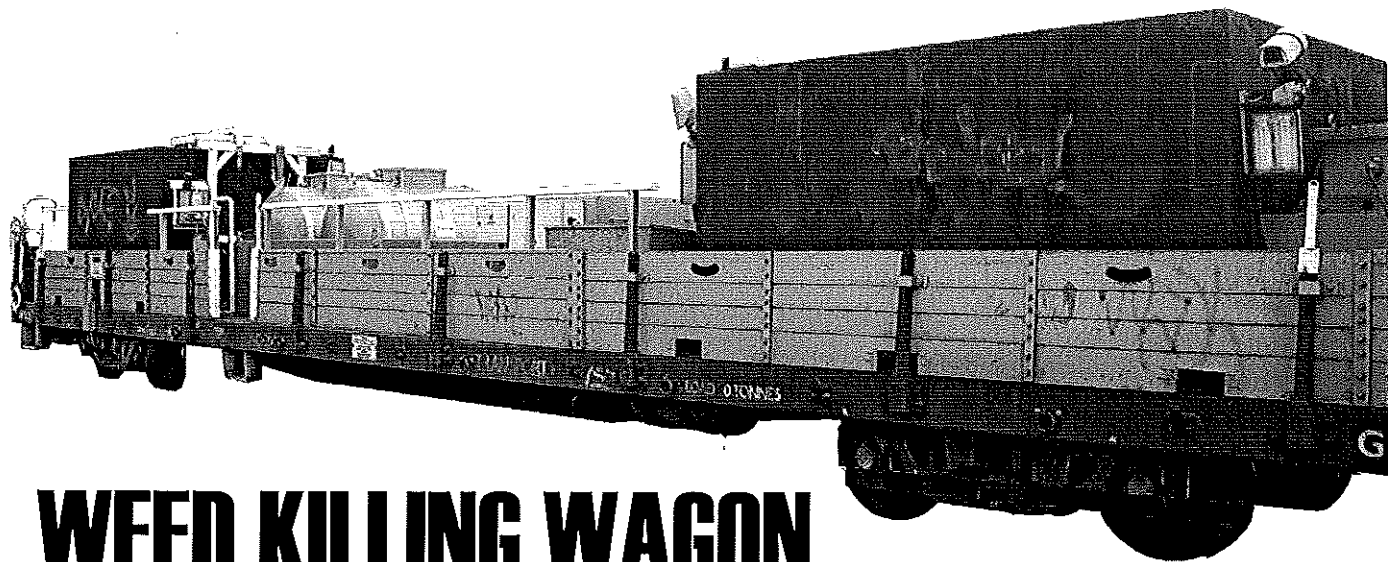


Vehicle Type:	DISAB, Wagon Mounted, Vacuum Loading Machine
Quantity Available:	2 (comprised of 2 GP wagons)
Tare:	68 Tonnes
Gross Weight:	85 Tonnes
Payload:	17 Tonnes / 12m ³
➤ Type:	Ballast and general waste
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	A vacuum suction machine used for removing contaminated ballast from 'wet beds', unblocking track drains and collecting other miscellaneous waste.
Bogie & Axle Centres:	10.20m & 1.45m
Overall Length:	32.66m (over buffers)
Timings:	Approximately 2hrs to load 17T of contaminated track bed ballast.

DE-ICING WAGONS



Vehicle Type:	De-Icing Wagon (Mounted on 20T Rail Wagon)
Quantity Available:	4
Tare:	18 Tonnes
Gross Weight:	24 Tonnes
Tank Capacity:	
➤ Type:	De-icing fluid
➤ Volume:	6000 Litres
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	For de-icing the current rails in winter weather conditions.
Bogie & Axle Centres:	15.24m & 1.52m
Overall Length:	20.71m (over buffers)



WEED KILLING WAGON

Vehicle Type:	Weed Killing Wagon (Mounted on 30T GP wagon)
Quantity Available:	1
Tare:	37 Tonnes
Gross Weight:	39 Tonnes
Tank Capacity:	
➤ Type:	Liquid Chemical Concentrate (Herbicide)
➤ Volume:	2000 Litres (2 x 1000L Tanks)
Coupling Type:	Buckeye + Drawhook & Side Buffers
Gauge:	LG1
Operating Capabilities:	<p>The system is configured to deliver up to two products simultaneously, with a maximum application rate of 14L/Hectare for each of the chemicals.</p> <p>Chemicals used are: Roundup (5L/Hec), Garlon (4.5L/Hec) and Pistol (4.5L/Hec)</p> <p>Tank capacity enables up 180km of track to be sprayed.</p>
Bogie & Axle Centres:	10.20m & 1.45m
Overall Length:	16.33m (over buffers)
Timings:	Sprays at 20mph

TRACK RECORDING VEHICLE

Vehicle Type:	Track Recording Vehicle (TRV) Ex-1960 Craven Stock
Quantity Available:	1 (composed of a set of 3 cars)
Gross Weight:	88 Tonnes
Payload:	N/A
Coupling Type:	Wedgelock
Gauge:	LG1
Operating Capabilities:	To measure track: gauge, twist (2m & 10m), cant, alignment, corrugation and undulation (LTOP & RTOP). Fitted with Central Line ATP and TBTC.
Operating Restrictions:	Not to enter: Kennington Loop, London Road Depot, Ealing Common Depot curve on depot entrance gate road.
Overall Length:	50.7m



ASSET INSPECTION TRAIN

Vehicle Type:	Asset Inspection Train (AIT) Ex-1972 Mk2 Tube Stock
Quantity Available:	1(Composed of a set of 4 cars)
Gross Weight:	125 Tonnes
Payload:	N/A
Coupling Type:	Wedgelock
Gauge:	LG1
Operating Capabilities:	Track Geometry System (SUGS); Rail Profile System (ORIAN); Location/Positioning System; Structure Gauging; Camera/Video Systems; Paint Spray; Shoe Gear Instrumentation; Corrugation Measurement System; UV Light; Doppler Radar; Acoustics/Noise Measurement.
Operating Restrictions:	same as TRV? (TBC)
Overall Length:	64.0m (approx TBC)

