



THOMSON ENGINEERING DESIGN LTD

Product Catalogue 2015

Section A

Rail Equipment



INTRODUCTION

Welcome to Thomson Engineering's Rail Products catalogue. Our range of rail products has expanded again this year so look out for the 'new' stars.

This catalogue divides our range into nine sections: Rail Handling, Sleeper Handling, Track Panel Handling, Ballast Handling, Clipping Machines, Special Equipment, Cable Handling Equipment, Trolleys and Access Equipment.

All our products are CE marked meeting stringent European Standards and legal requirements. Our design, manufacturing and quality systems have been accredited to ISO9001:2008.

Where our products also carry Network Rail Product Acceptance you will see this symbol and the PADS number.

Throughout this catalogue you will find QR codes. Scan these with your smart phone or tablet computer to go straight to the relevant page of our website where you will find further information, documentation, certificates, etc.

As well as manufacturing all the items you can see here, more than 40% of our business involves the design and manufacture of one-off or highly specialised equipment so, if what you need is not here, please contact us to discuss your precise requirements.

As our range is growing all the time you may wish to visit our website: www.thomsonrail.com for more information.



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ISO 9001:2008



All Thomson Products are proudly made in the United Kingdom

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SECTION 1: RAIL HANDLING EQUIPMENT

Thomson Engineering Design has the most comprehensive range of Rail Handling Equipment on the market. We have equipment for storing and handling rails of all types and in all applications.

Our range includes rail grabs, lifting beams and manipulators for use with excavator cranes, lorry cranes and rail cranes.

We have devices for handling short lengths of rail and for moving, threading and turning long welded rail. We even have a telescopic beam with a unique jaw arrangement capable of handling flat bottomed, bullhead and conductor rail even when they are stacked tightly together and we also provide an easy to use rail racking system for safe and tidy storage of stock rails in yards and depots.

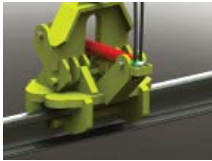
We believe that we can provide a solution to your exact requirements but all of our products began with a customer's special request so if you can't see what you need why not give us a call?



Recovering, Turning and Stacking Rails using the RT211 Cuttlefish Rail Turner

SECTION 1: VISUAL GUIDE

	DESCRIPTION	PAGE
	Rail Storage Racking Storing stock rails in yards and on site is a simple and safe matter using Thomson Engineering Design's Rail Racks.	A7
	Drag Clamp Our Drag Clamp is designed to handle tow loads up to 10,000kgf making it ideal for moving long welded rail sections up to 210m in length.	A8
	Autolok Rail Grab The Autolok Rail Grab, available in both manual and hydraulic versions, is a light weight solution to rail handling yet designed to withstand tough work.	A9
	Roseland Grab Specially designed for handling bullhead rail the Roseland Grab is a strong, robust unit for lifting and manipulating rail.	A10
	RLB20 Rail Beam Developed in association with Network Rail for handling short lengths and scrap rails the RLB20 rail beam incorporates a host of safety features.	A11
	RT211 Cuttlefish Rail Turner Our most versatile rail handling device, the Cuttlefish Rail Turner can lift, roll, pick and place all types of running rails and is the first choice for scrap rail recovery.	A12
	Universal Lifting Beam The Thomson Universal Lifting Beam is the heavy-duty solution to handling both rails and track panels thanks to its rotating jaw assemblies.	A13
	TRLB20 Telescopic Rail Lifting Beam This is the only Network Rail Approved hydraulic beam for handling new rails up to 18.5m in length.	A14
	RT210 Universal Rail Thimble Thomson Universal Rail Thimbles can be used with all types of running rails and have been tested to over 10,000kg.	A15
	MR212 Multi Rail Beam The new MR212 Multi Rail Beam is a telescopic rail beam suitable for use with all running and conductor rails and is designed to work with tightly stacked rails.	A16

	DESCRIPTION	PAGE
	TRB211 Rail Beam The TRB211 is part of the Megabeam system incorporating load levelling and other features for one-man loading of rails.	A17
	Bespoke Rail Handling Solutions Custom built devices for rail handling.	A18
	Rail Foot Thimble A truly universal threader for all flat-bottomed rails.	A19
	Butterfly Rail Grab A robust, low cost grab for heavy duty work.	A20
	Rigid Rail Beam A range of solutions for handling single or multiple rails where hydraulic power is not available.	A21
	Multi-Rail Handlers The heart of a suite of products for handling bulk deliveries of rail, Thomson Multi-Rail Lifters are available in manual and hydraulic versions.	A22
	Raven Rail Mover The Raven Rail Mover is a light weight, modular, portable solution to moving rails.	A23

1.1 RAIL STORAGE RACKING



Safely stacking rails, particularly bullhead section rail, is a simple matter with Thomson Rail Racks.

The system consists of two rack types: the Base Rack rests on the ground and carries the first layer of rails, the Layer Rack allows further layers to be stacked on top.

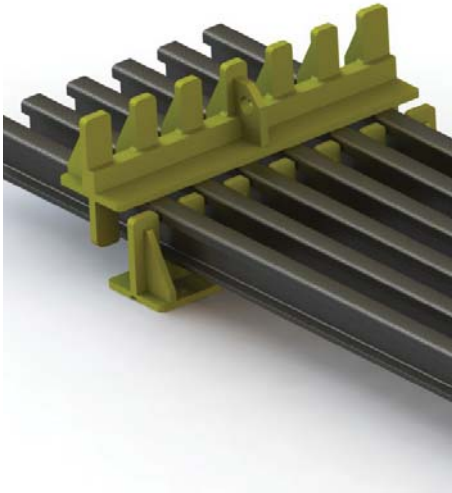
The maximum height of a stack of rails depends upon the ground conditions but, as well as maximising space, our Rail Racks provide a neat, safe solution.

Racks are available for all rail types including conductor rail and can be made to carry any required number of rails per layer.

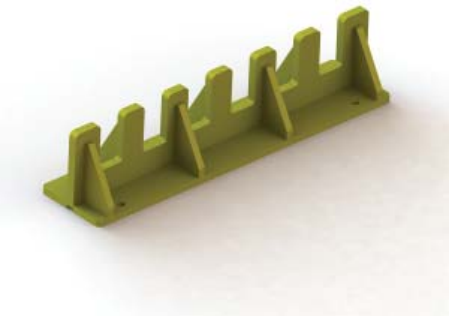
SPECIFICATIONS

Weight* (Bullhead Base 6-rail) 25 kg
Weight (Bullhead Layer 6-rail) 24.5 kg
Max stack height depends on ground conditions.

*All layer racks fitted with central lifting point



Body Colour 08E51 Yellow
Alternative Hot dip galvanized



FEATURES

- Lightweight & Compact
- Neat & Tidy Solution
- 6-rail racks manually handleable
- Racks available for any width
- Racks available for all rail types
- High Strength
- All Steel Construction
- Rails held at suitable spacing for grab handling
- High Resistance to abuse
- Powder coated or galvanized finish
- CE Marked

A ROBUST, SAFE AND SECURE SYSTEM FOR STACKING AND STORING RAIL SECTIONS

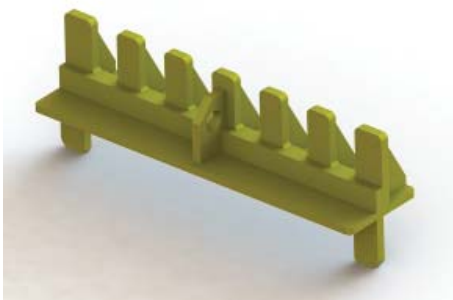
DOCUMENTATION

User Manual
Factory Inspection Certificate



BENEFITS

- Simple and Safe
- Compatible with Thomson Rail Handling Devices
- Maximise utilisation of space



Specifications given may be subject to change due to our policy of continuous improvement

1.2 DRAG CLAMP



The Thomson Engineering Drag Clamp has a unique cam action rail gripping system which tightens its grip on the rail the harder you pull.

Massive, all-steel construction ensures that the Thomson Drag Clamp is tough enough for the job.

Large bearing areas and soft surfaces where the drag clamp grips the rail prevent damage to the rail in use.

The cam surfaces can be rotated six times to give a very long life indeed.



FEATURES

- Lightweight & Compact
- Cam Mechanism
- Can be supplied with chain
- High Strength
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2007
- 10,000 kg Max Tow Load
- Fits CEN60 and BS113 Rail
- Full Factory Parts Backup
- CE Marked

A ROBUST, EASY TO USE DRAG CLAMP, SMALL ENOUGH TO FIT THE TOOLBOX OF MOST RRV'S

SPECIFICATIONS

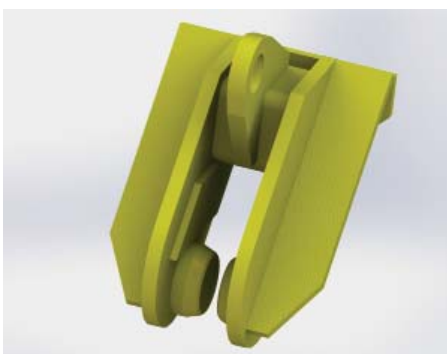
Weight	45 kg
Rated Pull	10,000 kgf
Proof Load (Factory test)	20,000 kgf
Mechanism	Cam type
Construction	Rigid All Steel
Body Colour	08E51 Yellow

OPTIONS

Can be supplied with tow chain and / or shear link

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate



BENEFITS

Cam mechanism means no linkage to stick.

Secure grip on rail.

No moving parts to jam or fail.



1.3 AUTOLOK RAIL GRAB



The Thomson Autolok Rail Grab is available in two versions: the manually operated Autolok M and the hydraulically operated Autolok H.

Whichever model you choose the Autolok can be supplied for use in handling running rails, grooved rails and conductor rails as required.

A key feature of the Autolok Rail Clamp is the fully enclosed mechanism with a 'red flag' indicator to tell the operator when the device is safely locked onto the rail.

Although the Autolok weighs just 25kg it has a safe working load of 2,000 kg and is tested to 4 tonnes.



FEATURES

- Lightweight & Compact
- Cam Mechanism
- Hydraulic or Manual Operation
- High Strength
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2006
- 2,000 kg WLL
- 4,000 kg Proof Load
- Prototypes tested to over 12 tonnes
- Full Factory Parts Backup
- CE Marked

A ROBUST, RELIABLE, LOW COST RAIL GRAB SMALL ENOUGH TO FIT THE TOOLBOX OF MOST RRV's

SPECIFICATIONS

Weight (Autolok H)	25 kg
Weight (Autolok M)	24.5 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Cam Operated
Indication	'Red Flag' Indicator
O/A Height	575 mm
O/A Width	140mm
O/A Length	230 mm

Max. Hyd. Pressure (H)	190 Bar
Min. Hyd.. Pressure (M)	90 Bar
Handle Operating Force (M)	50 N
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

Cam mechanism means no linkage to stick.

Fully enclosed mechanism means reduced damage.

High strength means the Autolok will withstand the heavy duty use associated with modern RRV's



Specifications given may be subject to change due to our policy of continuous improvement

1.4 ROSELAND GRAB



The Roseland Grab from Thomson Engineering has an unusual twin hinge design which allows the grab to be more easily used for lifting and bullhead rail. It is also suitable for flat bottom rail sections.

Robustly constructed and with hydraulic protection through a twin pilot-operated check valve mounted directly on the cylinder this grab is easy and safe to use.

All joints are fitted with replaceable wear parts and grease nipples for daily lubrication.

The Roseland Grab has a safe working load of 1,500 kg and is tested to 3 tonnes.

SPECIFICATIONS

Weight	170 kg
WLL (Safe Working Load)	1,500 kg
Proof Load (Factory test)	3,000 kg
Mechanism	Hydraulic Cylinder
O/A Height	650 mm
O/A Width	300 mm
O/A Length	520 mm



FEATURES

- Lightweight & Compact
- Check valve for safety
- High Strength
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- 1,500 kg WLL
- 3,000 kg Proof Load
- Proved in use since 2008
- Full Factory Parts Backup
- CE Marked

A ROBUST, VERSATILE RAIL GRAB
ESPECIALLY SUITED TO HANDLING
BULLHEAD RAILS

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

When picking up bullhead rail the unique twin hinge arrangement allows the grab to roll with the rail.

Safe, simple lifting of all rail sections



1.5 RLB20 RAIL BEAM



The Thomson RLB20 Rail Beam is the ideal solution for lorry cranes and excavators handling short lengths of new rail or full lengths of scrap rail.

Using the same fail-safe cam mechanism as many of our other rail handling and panel beams this light, robust little beam is designed for long life with minimal maintenance.

Fitted with a hydraulic rotator, safety lift sensing valve, system pressure control valve and check valves on the grab cylinders this is a top specification product which is used on excavators, lorry loading cranes and rail mounted maintenance machines.

SPECIFICATIONS

Weight (C/W rotator and head)	285 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Cam Operated
Indication	'Red Flag' Indicator
O/A Height	710 mm
O/A Width	290 mm
O/A Length	1300 mm



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red



BENEFITS

- Cam mechanism means no linkage to stick and fail safe operation.
- Fully enclosed mechanism means reduced damage.
- High strength for durability.

FEATURES

- Lightweight & Compact
- Fail-safe Cam Mechanism
- Red-flag jaw safety indicators
- High Strength
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2007
- 2,000 kg WLL
- 4,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A STRONG, SAFE, RELIABLE RAIL HANDLING BEAM FOR DELIVERY AND SITE APPLICATIONS

DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- LOLER Test Certificate
- Pads No. 094/002030



Specifications given may be subject to change due to our policy of continuous improvement

1.6 RT211 CUTTLEFISH RAIL TURNER



The new RT211 Rail Turner from Thomson Engineering is our most versatile rail handling product.

Robustly constructed and with hydraulic protection through a twin pilot-operated check valve mounted directly on the cylinder this grab is easy and safe to use.

All joints are fitted with replaceable bushes and grease nipples for daily lubrication.

The unique feature of the RT211 is its ability to grab, manipulate and turn rails up to 200m in length. This makes it ideal for rail handling and rail recovery operations.



FEATURES

- Hydraulic Rotation
- Hydraulic Rail Jaws
- Hydraulic Jaw Tilt
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Can work in any position
- 2,000 kg WLL
- 4,000 kg Proof Load
- Can grab rail from any angle
- Full Factory Parts Backup
- CE Marked

THE MOST VERSATILE AND USEFUL
RAIL MANIPULATOR ON THE MARKET
TODAY

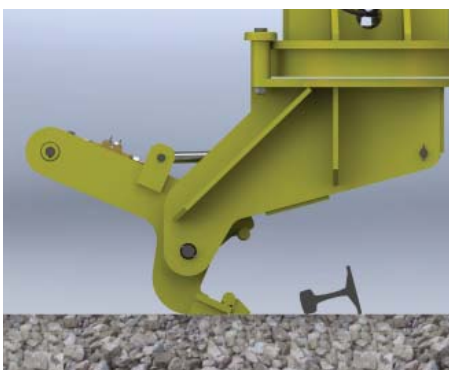
SPECIFICATIONS

Weight approx.	650 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Fully Hydraulic
Min. Grip Force	40 kN
Min. Rotation Moment	9,500 kNm
O/A Width	140mm
O/A Length	230 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Rotator Max Hyd.. press.	150 Bar
Body Colour	08E51 Yellow
Jaw and cylinder	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate
PADS No. 094/011081

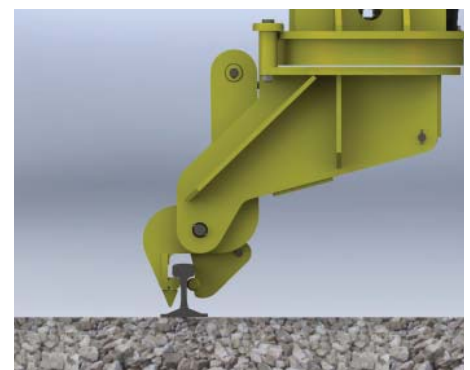


BENEFITS

Recover rails of any length from anywhere.

Copes easily with overturned rails.

No need for manual handling or rolling of rails.



1.7 UNIVERSAL LIFTING BEAM



The Thomson Universal Lifting Beam is the industry standard solution for tandem lift panel handling but it is also capable of use as a rail handling beam.

Each end of the beam has hydraulic rail jaws mounted in turntable mounts which allow the jaws to rotate to change from panel mode to rail handling mode.

The 10,000kg Safe Working Load means that the beams have plenty of strength for the task!

A load sensing valve prevents the jaws from opening when the beam is carrying a load.



FEATURES

- Jaws on rotating mounts
- Load sensing safety valve
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2000
- 10,000 kg WLL
- 20,000 kg Proof Load
- Rotator, swivel head and low-headroom adapter head versions available
- Full Factory Parts Backup
- CE Marked

THE MOST VERSATILE AND POPULAR COMBINATION LIFTING BEAM ON THE MARKET

SPECIFICATIONS

Weight (Standard)	380 kg
Weight (with rotator) typical	460 kg
WLL (Safe Working Load)	10,000 kg
Proof Load (Factory test)	20,000 kg
Mechanism	Hydraulic
Indication	jaws visible to operator
O/A Height	depends on config.
O/A Width	380mm
O/A Length	1820 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate
PADS No. 094/002028



BENEFITS

- Multi-purpose beam.
- High reliability, low maintenance.
- Rotator, swivel head and low-headroom attachment head options.
- Built-in pressure control to prevent overloading of hydraulic system



Specifications given may be subject to change due to our policy of continuous improvement

1.8 TRLB20 TELESCOPIC RAIL LIFTING BEAM



Our TRLB20 Telescopic Rail Beam is the first choice for handling new rails up to 20m in length.

This beam is the only hydraulic rail beam certified by Network Rail for handling new rail.

A variety of versions are now available for handling running rail, conductor rail and grooved rail.

Many of these beams are in use on rail delivery lorries where their ease of integration with lorry loading cranes is much appreciated.

TRLB20 Telescopic Rail Beams are supplied with transport stands as standard equipment.

SPECIFICATIONS

Weight (Typical)	650 kg
WLL (Safe Working Load)	1,250 kg
Proof Load (Factory test)	2,500 kg
Mechanism	Cam Operated
Indication	'Red Flag' Indicator
O/A Height (spec. shown)	910 mm
O/A Width	290 mm
O/A Length	3,600 to 6,200 mm



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

FEATURES

- Lightweight & Compact
- Fail-Safe Cam Mechanism
- Running rail, conductor rail and grooved rail versions available
- Manual and hydraulic telescoping versions
- High Strength
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2006
- 1,250 kg WLL
- 2,500 kg Proof Load
- Automatic clamping of telescopic sections
- 'Red-Flag' jaw status indicators
- Full Factory Parts Backup
- CE Marked

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate
PADS No. 094/002031



BENEFITS

- Cam mechanism means no linkage to stick.
- Fully enclosed mechanism means reduced damage.
- The only hydraulic beam currently accepted by Network Rail for the handling of new rail in 18m lengths.



1.9 RT210 UNIVERSAL RAIL THIMBLE



The RT210 Universal Rail Thimble supports and manipulates long welded rail using four rollers running under the rail head.

This thimble's design means that it can work with any flat bottom running rail without any adjustments being required. Rail does not need to be lifted onto blocks to allow the thimble to begin work.

A key feature of the RT210 is the well guarded hydraulic cylinder which prevents damage in rough use.

Prototype units were tested to twenty tonnes during development proving the strength and durability.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinder
- Bronze bushes throughout
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2002
- 2,000 kg WLL
- 4,000 kg Proof Load
- Prototypes tested to 20 tonnes
- Soft rollers available for coated rails.
- Full Factory Parts Backup
- CE Marked

A FANTASTICALLY STRONG AND EASY TO USE THIMBLE FOR ALL FLAT BOTTOM RUNNING RAILS

SPECIFICATIONS

Weight	235 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Hydraulic
O/A Height	735 mm
O/A Width	730mm
O/A Length	630 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Cylinder colour	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate
PADS No. 094/020080

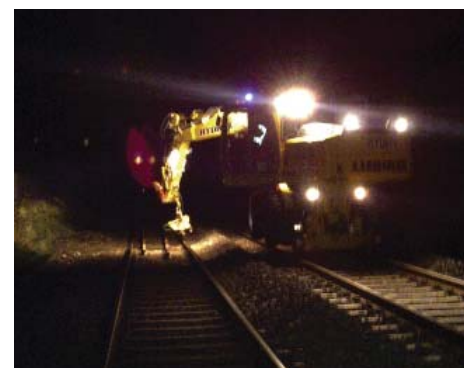


BENEFITS

No adjustments necessary for different rail sections

Check valve protects against hose failure

Simple and safe to use



Specifications given may be subject to change due to our policy of continuous improvement

1.10 MR212 MULTI RAIL BEAM



Combining a telescopic rail beam with a unique jaw arrangement the Multi Rail Beam can handle all types of rail including conductor rail.

The beam can be set to any length from 3.6m to 6m and has a Safe Working Load of 2,000kg for heavy duty operation.

Its unique jaw arrangement allows the Multi Rail Beam to pick flat bottom and conductor rails from tight stacks and bullhead rail from our special rail racks.

The Multi Rail Beam is available with a number of options including hydraulic or manual telescope and special versions for longer rails.



FEATURES

- Strong and Versatile
- Jaws fit between tight stacked rails
- Hydraulic Operation
- High Strength
- All Steel Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Works with Running Rails
- Works with Conductor Rails
- 2,000 kg WLL
- 4,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A TRULY UNIVERSAL SOLUTION TO THE HANDLING OF SINGLE RAILS

SPECIFICATIONS

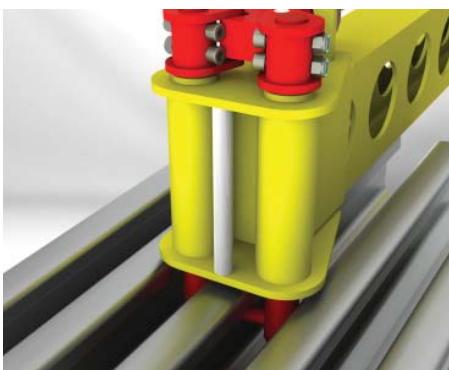
Weight (Typical Spec.)	540 kg
Weight of transport stands	30 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Rotary Jaw
Indication	'Flag' Indicator
O/A Height (typical)	750mm approx
O/A Width	400mm
O/A Length	3,800 - 6,200 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar

Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate

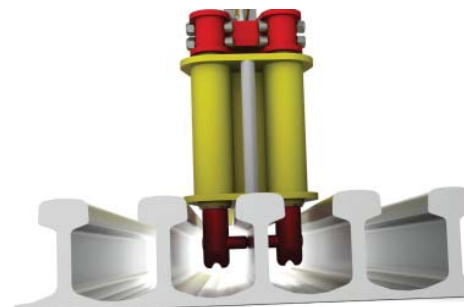


BENEFITS

One tool for every job.

Heavy duty design for long working life.

Load and unload rails in tight stacks without the need to manually group or spread the stacks.



1.11 TRB211 TWIN RAIL BEAM



Part of the Thomson Megabeam System - an interchangeable materials handling system for large hydraulic cranes - the twin rail beam allows the machine operator to extend and balance the beam using cab-mounted controls.

The Thomson Megabeam System consists of a super heavy-duty rotator with a quick change feature which allows a variety of materials handling beams and devices to be fitted and used with high capacity materials handlers and excavators.

The twin rail beam handles rails up to 21m, singly or in pairs.



FEATURES

- Quick Change Fitting to Megabeam Rotator
- Hydraulic Telescope
- Hydraulic Load Balancing
- Can be equipped with a variety of grab devices
- Light weight, heavy duty construction
- Full Factory Parts Backup
- CE Marked

THE MEGABEAM SYSTEM IS A UNIQUE AND HIGHLY VERSATILE MATERIALS HANDLING SOLUTION FOR RAILWAY PARTS AND MATERIALS.

SPECIFICATIONS

Megabeam system components are built to order with specifications varying according to application.

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	100 Bar

Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



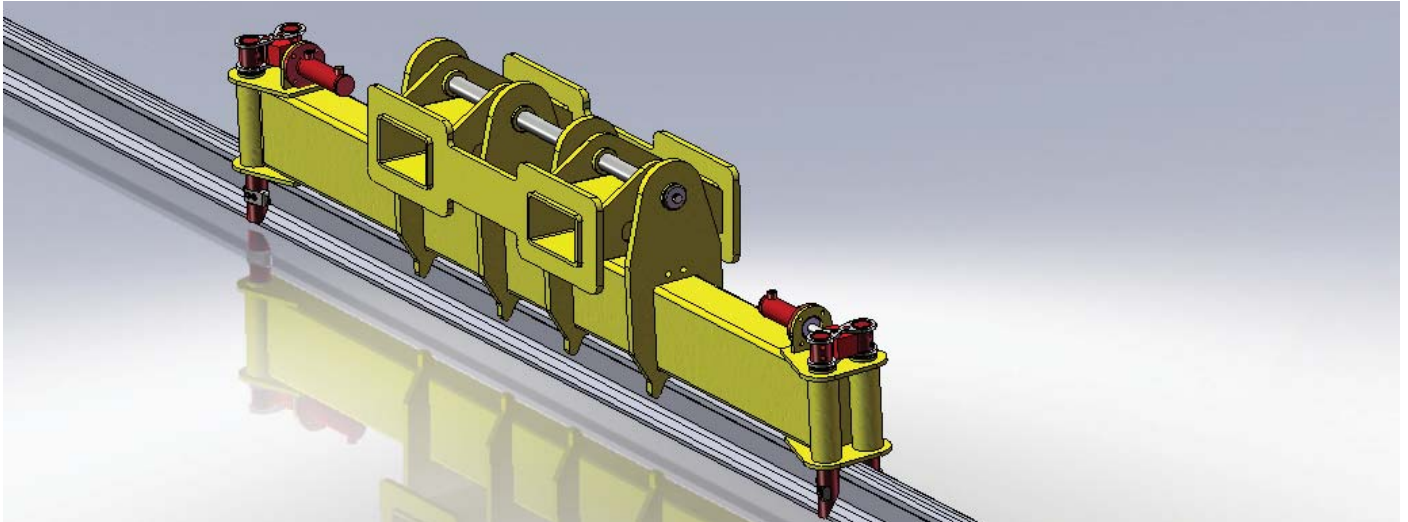
BENEFITS

- Full control of lift from cab of host machine.
- Balance control ensures rails are level whilst lifting.
- One man operation for safety



Specifications given may be subject to change due to our policy of continuous improvement

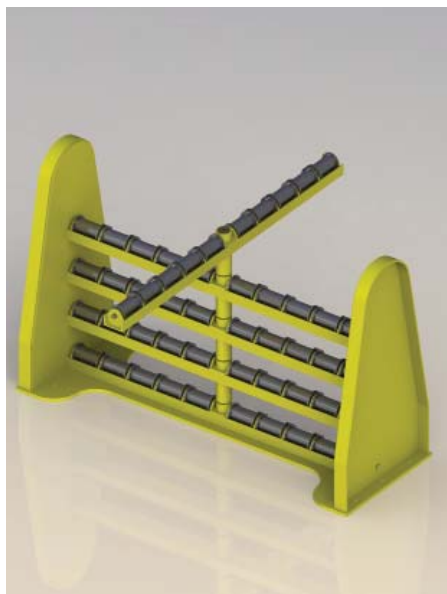
1.12 BESPOKE RAIL HANDLING EQUIPMENT



If you don't see a rail handling device in our range which suits your individual needs then we will be pleased to work with you to develop a bespoke solution.

We design, prototype, test and certificate in-house. Our design team are trained in virtual prototyping - a series of computer simulation and analysis techniques which allow designs to be evaluated.

Virtual prototyping greatly reduces the time required to develop working products and reduces costs.



EXAMPLES

- Roller Support carrier for multiple rails
- Fork liftable rail handler (above)
- Scrap rail handling forks (below)
- Rail jacking trolley
- Rail threading machine
- Rail dispensing rollers
- Multiple rail handling clamps
- Multiple long rail handling beams
- Long Rail Handling Beams
- Self powered and radio controlled rail lifting beams

We have designed equipment for handling rails from 0.5m to 48m in length.

FACILITIES

Solid modelling
Finite Element Analysis
Fluid Flow Analysis
Non-Linear Analysis
Drafting to ISO and BSI standards
Weld Procedure Development
Load, Impact and Fatigue Testing
Technical Authorship Software

In-house production facilities for equipment and modules up to 16m x 3m x 3m and weighing up to 20 tonnes.

Fully equipped machine shop, fabrication and sheet metal workshops, wiring, hydraulic and mechanical assembly and testing facilities.

DOCUMENTATION

As a minimum, all equipment is supplied with:

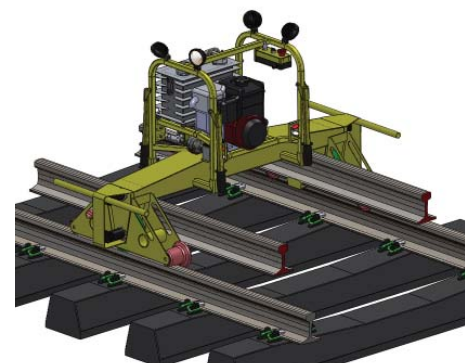
Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate



BENEFITS

Full in-house design, prototyping, construction and testing gives total control of quality and specification

ISO approved design and development systems



1.13 RAIL FOOT THIMBLE

New!



A truly universal rail thimble for threading all types of flat bottom rail including both running rail and conductor rail sections.

The hydraulic cylinders allow the Rail Foot Thimble to grip the base of the rail section securely and to guide it accurately into place.

A special mechanism automatically withdraws the rollers a precise amount as the rail is lifted to ensure smooth running.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinders
- Greased bushes throughout
- All steel construction
- High resistance to dynamic loads
- Universal application
- Case hardened rollers and shafts
- 2,000 kg WLL
- Prototypes tested to 12,000kg
- Full Factory Parts Backup
- CE Marked

A UNIQUE DESIGN OF THIMBLE FOR ALL FLAT BOTTOM RUNNING AND CONDUCTOR RAILS.

SPECIFICATIONS

Weight	250 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Fully Hydraulic

O/A Height (typical)	580mm
O/A Width	480mm
O/A Length	550 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar

Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



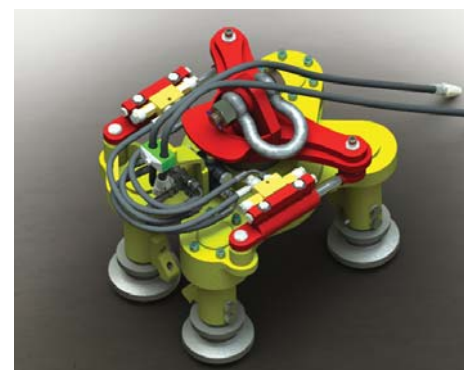
BENEFITS

No adjustment necessary for different rail sections.

Check valve protects against hose failure.

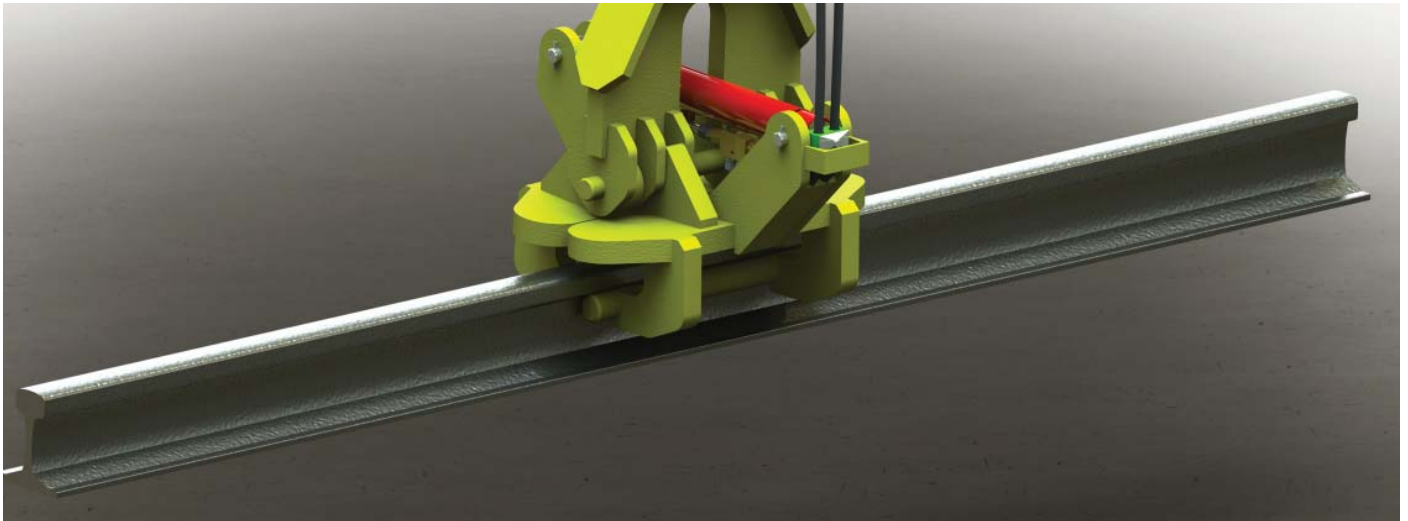
Works with all flat bottom rails.

Replaceable rollers and shafts.



Specifications given may be subject to change due to our policy of continuous improvement

1.14 BUTTERFLY RAIL GRAB

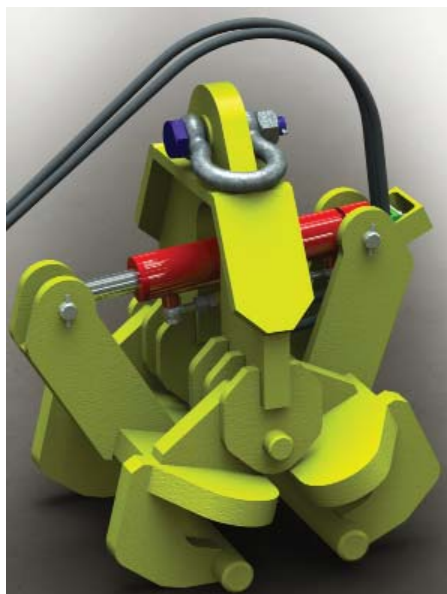


A simple, low-cost grab with high grip force and heavy construction for handling rail sections of all types.

The main sections of the grab are 40mm steel plate and triple welded for strength.

A twin, pilot-operated check valve mounted on the hydraulic cylinder protects against release of the load in the event of hose failure and heavy duty guards help protect the hoses.

All joints are fitted with grease nipples and each grab is tested to 5,000 kg before despatch.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinder
- Greased bushes throughout
- All steel construction
- High resistance to dynamic loads
- 2,500 kg WLL
- Prototypes tested to 12,000kg
- Full Factory Parts Backup
- CE Marked

A LOW-COST GRAB BUILT FOR HEAVY DUTY USE, SIMPLE SERVICING AND RELIABLE OPERATION.

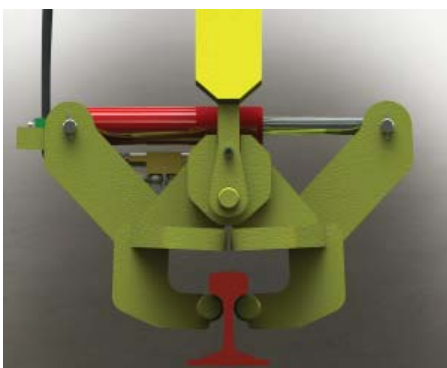
SPECIFICATIONS

Weight	225 kg
WLL (Safe Working Load)	2,500 kg
Proof Load (Factory test)	5,000 kg
Mechanism	Fully Hydraulic
O/A Height (typical)	720mm
O/A Width	730mm
O/A Length	630mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Hydraulic Cylinder	Signal Red

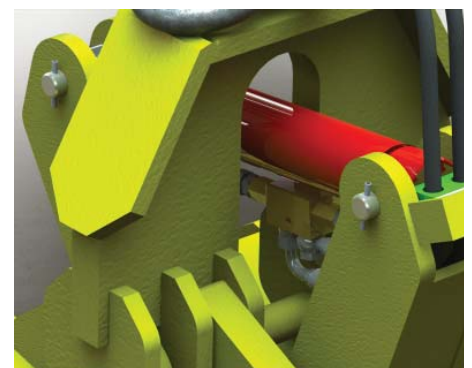
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- Low cost reliable construction
- Check valve protects against hose failure.
- Works with all flat bottom rails.
- Replaceable bushes and shafts.



1.15 RIGID RAIL BEAMS



For handling rail using basic cranes without hydraulic services Thomson Engineering Design Ltd provide a range of lifting beams from 500kg to 15,000kg capacity.

Beam lengths from 1m to 24m with rigid, telescopic or folding design are available together with a range of single or multiple rail grabs as required.

Each beam is tested to a proof load well in excess of its safe working load and a LOLER certificate is issued with each one.

Bespoke beams can also be provided for specific lifting tasks.

SPECIFICATIONS

Weight Depends on Specification
WLL (Safe Working Load) to 15,500 kg

Standard Colour

08E51 Yellow

Typical lead times for bespoke beams 3 to 6 weeks from order.



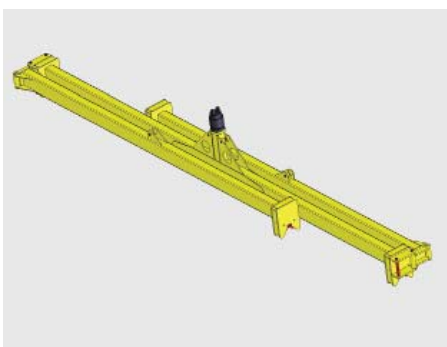
FEATURES

- Fully tested and certificated
- Wide range available
- Custom designs available
- Single and multiple rail clamps
- Centre lifting point or spreader chain option
- Rigid, telescopic or folding designs
- Full Factory Parts Backup
- CE Marked

A WIDE RANGE OF LIFTING BEAMS TO SUIT ALL REQUIREMENTS WITH FULL CERTIFICATION.

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



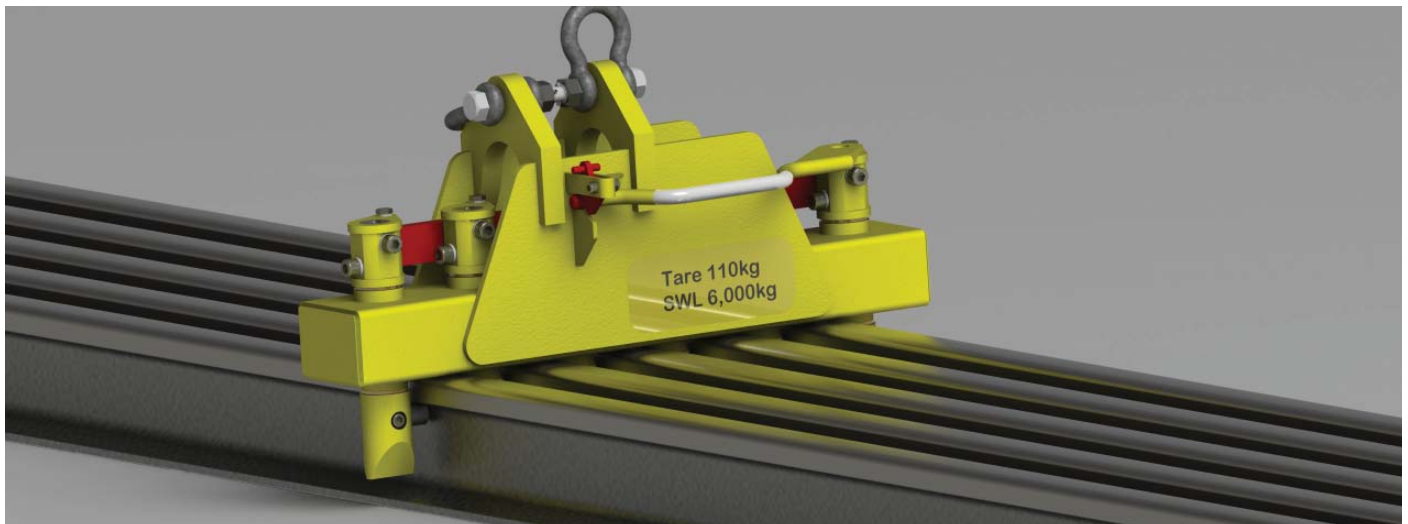
BENEFITS

Bespoke Design
High safety factor
Rail clamps available



Specifications given may be subject to change due to our policy of continuous improvement

1.16 MULTI-RAIL HANDLER



The Thomson Multi Rail Lifter is designed for the handling of bulk rail deliveries.

The twin hitch points -each fitted with a 6.5 tonne rated safety bow shackle - allow the device to handle 1,2,3,4 or 5 rails.

Both manual (illustrated) and hydraulic versions are available.

Multi Rail Lifters can be made to suit any rail section including conductor and grooved rails.



FEATURES

- Manual or Hydraulic Actuation
- Twin hitch points for odd and even numbers of rails
- Heavy duty construction
- Gate latch security for handle
- All joints fitted with grease nipples.
- Full Factory Parts Backup
- CE Marked

A LOW-COST GRAB BUILT FOR HEAVY DUTY USE, SIMPLE SERVICING AND RELIABLE OPERATION.

SPECIFICATIONS(TYPICAL)

Weight	115 kg
WLL (Safe Working Load)	6,000 kg
Proof Load (Factory test)	10,000 kg
Mechanism	Hydraulic/Manual

O/A Height (typical)	495mm
O/A Width	290mm
O/A Length	890mm

Max. Hyd.. Pressure (H)	190 Bar
Min. Hyd.. Pressure	90 Bar

Body Colour	08E51 Yellow
Hydraulic Cylinder	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate

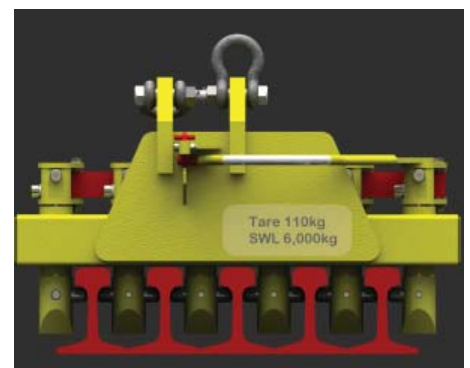


BENEFITS

Handle 1, 2, 3, 4 or 5 rails.

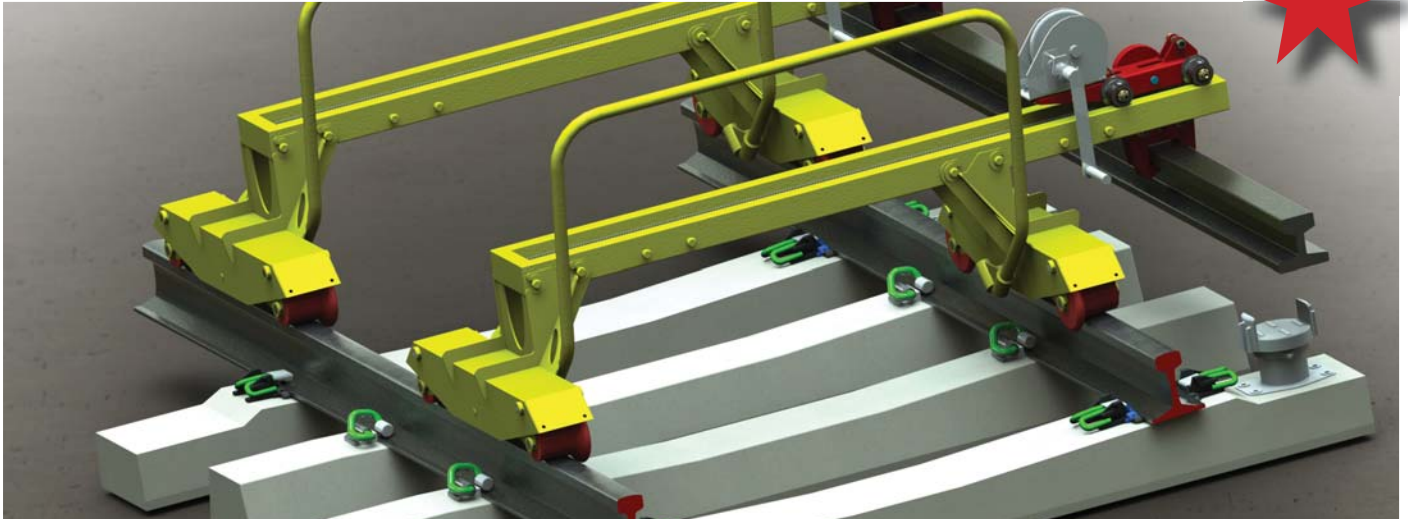
Rapid loading and unloading of rails.

Both Hydraulic and Manual versions can be used with spreader beams for handling long rail lengths.



1.17 RAVEN RAIL MOVER

New!

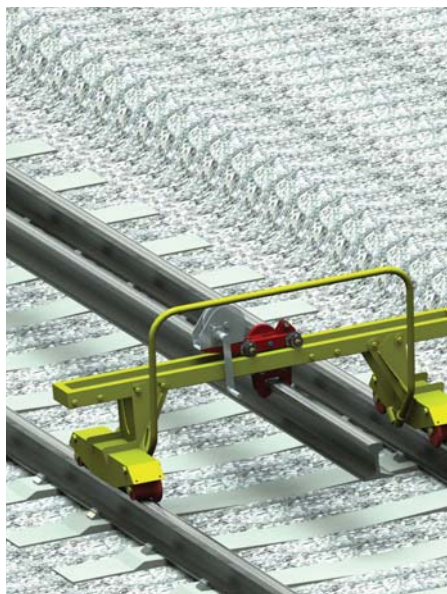


The Thomson Raven is a new concept in manual rail handling.

Two versions are available: standard and wide top. Both can pick and carry rails in the four-foot but the wide top can also lift and carry conductor third rails.

The innovative lifting device design allows the frame to be considerably smaller and lighter than other designs and there is no need to fit a support bar to maintain gauge when travelling.

All parts are hand portable and the device is fitted with regenerative brakes released by the full width push handle.



FEATURES

- Portable, modular design
- Two models
- Insulated or conductive wheels
- Heavy duty construction
- Clip together construction
- Load sensing regenerative brakes
- Full width push handle
- Wide top version can lift and transport DC third rail
- Full Factory Parts Backup
- CE Marked

A SIMPLE AND VERSATILE RAIL MOVER FOR ALL WORK.

SPECIFICATIONS(TYPICAL)

Weight (std / wide)	98 / 105 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Manual

Frame Height (above rail)	445mm
Push Handle (above rail)	850 mm
O/A Width(std / wide)	1694 / 1975mm
O/A Length	840mm

Max. lift capacity 1,000 kg

Body Colour 08E51 Yellow
Lifting Gear Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- Lift and carry rails.
- Rapid loading and unloading of rails.
- Lift and carry conductor rails.
- Only 5 parts to carry.
- Weights include lifting gear.



Specifications given may be subject to change due to our policy of continuous improvement

SECTION 2: SLEEPER HANDLING EQUIPMENT

Thomson Engineering's range of equipment for handling and laying sleepers (ties) and bearers includes products for all purposes.

The Four-Sleeper Handler finds use with road hauliers for the rapid loading and unloading of lorries. This device is most commonly mounted on lorry self-loading cranes.

On site, our Sleeper Manipulator is the choice for handling single sleepers, for instance in sleeper changing or for separating packs of steel sleepers.

If it is concrete or timber sleepers which you need to lay then the Sleeper Spreading Beam range gets the job done quickly and accurately. Within this range there are a number of differently configured products for working with small and large machines, single and twin-jib cranes and custom versions can always be created to special order.

For steel sleepers our Pack Grab and Steel Sleeper Laying machines offer fast, safe laying at high output rates. Using the Track Line Marker to help guide the laying machine operator ensures that track is placed precisely.

For slab track our Sonnevle Block Grab makes unloading the pallets and placing the blocks in position a simple one-man operation.

Whatever the task we are confident that you will find a solution within our range and all are backed by our 24 hour Factory Technical Support and Parts Service.



SECTION 2: VISUAL GUIDE

	DESCRIPTION	PAGE
	4-Sleeper Lifter A purpose designed grab for truck mounted cranes used for loading and unloading all types of sleepers.	A26
	Sleeper Manipulator A versatile grab specifically designed for handling sleepers and for use in sleeper changing operations. Interchangeable pads for all sleeper types	A27
	Long Bearer Beam Our Long Bearer Beam is the perfect solution for handling sleepers of variable length.	A28
	Sleeper Spreader Beams Available in 4, 7 and 8 sleeper versions for precision placement of concrete sleepers by excavators and Road Rail Vehicles or for up to 28 sleepers for use with tandem lift systems.	A29
	Steel Sleeper Spreader / Layer Rapidly split packs of steel sleepers and lay them onto the ballast bed.	A30
	Track Line Marker Makes light work of marking out the track bed for accurate sleeper placement.	A31
	Sonneville Block Layer Lift and spread four blocks per lift. This device is ideal for use with light excavators giving high output and accurate placement on slab track installations.	A32
	Steel Sleeper Pack Grab The only purpose designed sleeper pack grab on the market. The unique design distributes the grip force over all the sleepers equally eliminating the risk of crushing.	A33
	Bulk Sleeper Loading Grab Designed for loading trucks and trains, this grab is available in versions up to 60 sleepers per load and requires no hydraulic or other power source	A34
	Concrete Sleeper Pack Grab A purpose designed sleeper pack grab designed for use with heavy excavators for the rapid bulk handling of concrete sleepers.	A35
	Plate Grab A unique design for handling both steel sleeper packs and concrete sleepers but it will also handle short lengths of rail. This grab is available in a range of sizes.	A36 

2.1 FOUR-SLEEPER LIFTER



The Four-Sleeper Handling device was designed as an attachment for lorry self-loading cranes.

The device is adjustable to cope with a wide range of sleeper widths, depths and lengths. Wear pads are fitted to reduce damage from exposed reinforcing rods common to continental sleepers.

Adjustment is simple and damage to the sleepers is prevented by the fitment of rubber protectors to the contact areas.

The device may be supplied fitted with a hydraulic rotator or a simple swivel hook attachment point.



FEATURES

- Strong and Reliable
- Check valves on hydraulic cylinders
- Heavy Duty slide ways
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2009
- 2,000 kg WLL
- 4,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A VERSATILE SLEEPER LOADING GRAB FOR ROAD HAULAGE APPLICATIONS

SPECIFICATIONS

Weight	525 kg	Max. Hyd.. Pressure	210 Bar
WLL (Safe Working Load)	2,000 kg	Min. Hyd.. Pressure	90 Bar
Proof Load (Factory test)	4,000 kg		
Mechanism	Hydraulic	Body Colour	08E51 Yellow
O/A Height	960 mm	Cylinders	Signal Red
O/A Width	1515mm		
O/A Length (min)	2040 mm		

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate

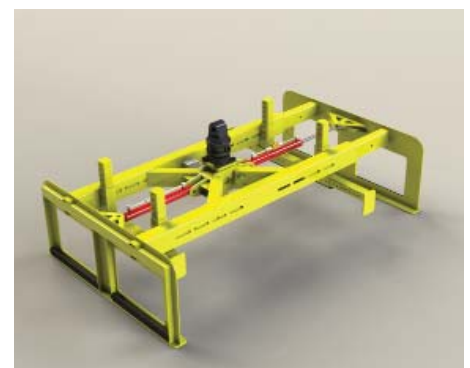


BENEFITS

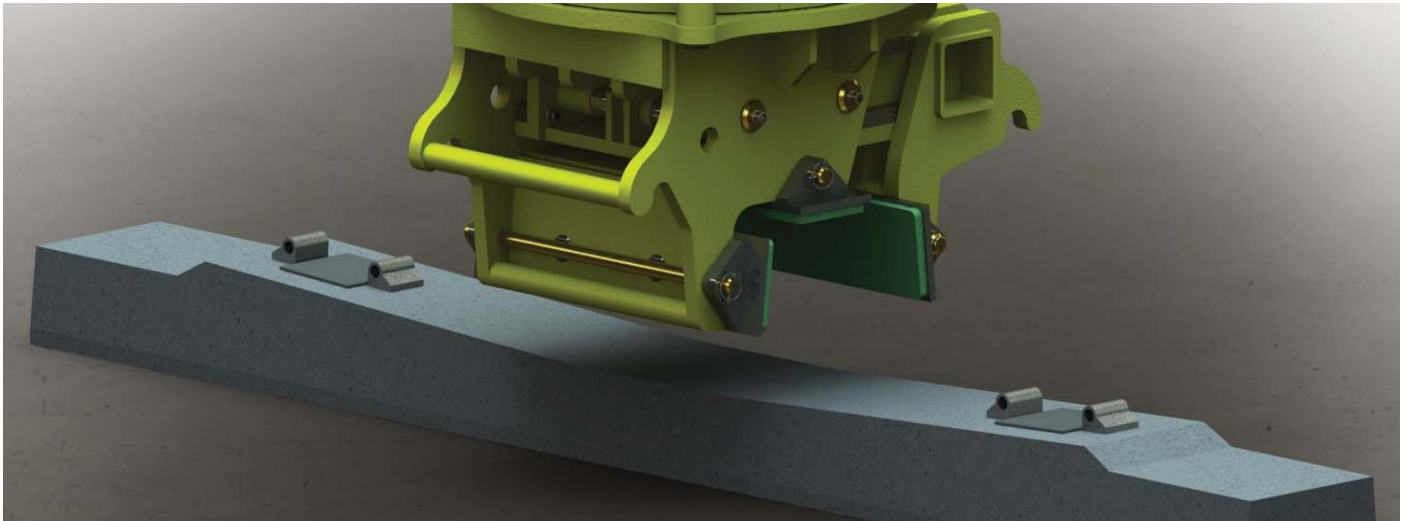
Check valves on cylinders protect against hose failure

All known wear points fitted with replaceable wear parts.

Designed for long life and hard work



2.2 SLEEPER MANIPULATOR



The Thomson Sleeper Manipulator is designed for the precision handling and placement of steel, concrete and timber sleepers.

Unique, four-sided jaws can be rotated to suit the type of sleeper: urethane lined for concrete, patterned for timber and with base bar for steel sleepers.

Where space is restricted the compact jaw option features interchangeable pads.

Jaws open to 400mm and close to 200mm wide to accommodate all sleeper types and the 500 kg safe working load allows this grab to handle even the longest bearers.

SPECIFICATIONS

Weight	635 kg
WLL (Safe Working Load)	500 kg
Proof Load (Factory test)	1,000 kg
Mechanism	Hydraulic
Jaw Range	200 - 400mm
O/A Height	1075 mm
O/A Width	700 mm
O/A Length	825 mm



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Grip Force (@200 Bar)	74,600 N
Body Colour	08E51 Yellow

FEATURES

- Rotating or interchangeable jaws for steel, concrete and timber sleepers
- Urethane pads for concrete sleepers eliminate damage
- Hydraulic rotator
- Two pin mounting to host machine
- Heavy duty construction
- Twin jaw cylinders with check valves
- 500 kg WLL
- 1,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

AN IDEAL SOLUTION FOR PRECISION SLEEPER HANDLING AND FOR SLEEPER CHANGING.

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

Narrow profile for ease of access to clips / chairs.

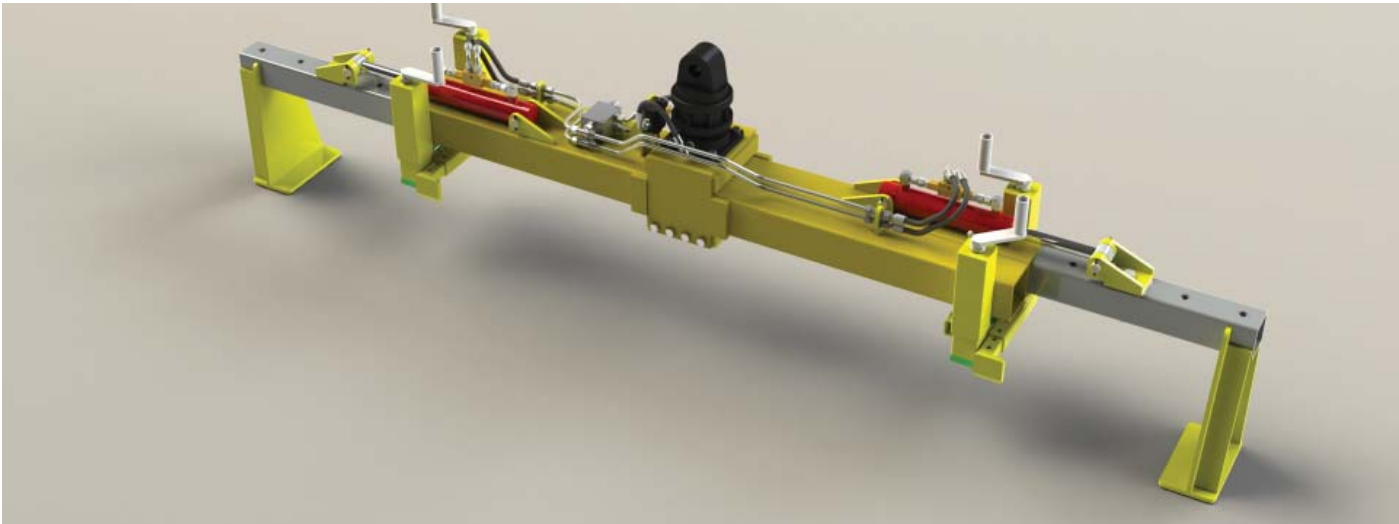
Fully enclosed mechanism means reduced damage.

Hydraulic rotation and 2 pin mounting mean precise sleeper positioning and manipulation.



Specifications given may be subject to change due to our policy of continuous improvement

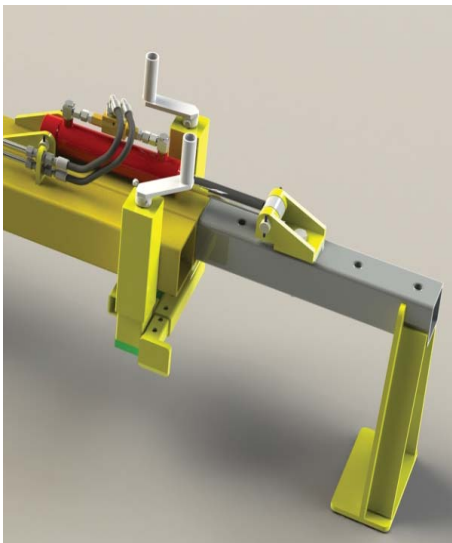
2.3 LONG BEARER BEAM



The Thomson Long Bearer Beam is designed for the handling of crossing timbers and concrete bearers of all kinds.

All parts of the device are adjustable to accommodate different styles of bearer and soft pads are fitted to the top contact surfaces to protect the visible upper surfaces of the load.

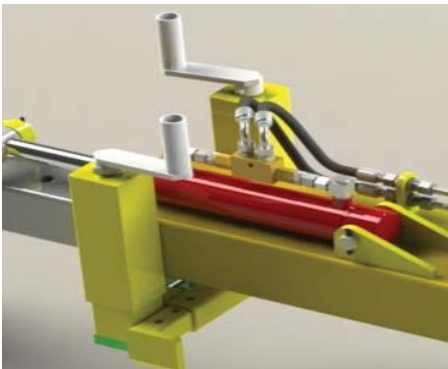
Check valves fitted to the grip cylinders prevent the loss of grip in the event of a damaged hydraulic hose and a load sensing valve system prevents the operator releasing the load until it is safely lowered to the ground



SPECIFICATIONS

Weight	650 kg
WLL (Safe Working Load)	1,000 kg
Proof Load (Factory test)	2,000 kg
Mechanism	Hydraulic
O/A Height	950 mm
O/A Width	450 mm
O/A Length (min)	2100 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	100 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red



FEATURES

- Adjustable depth
- Adjustable width
- Adjustable length
- 200mm cylinder stroke each end
- Capacity 2,000mm to 4,000mm bearer length
- 1,000 kg WLL
- Full Factory Parts Backup
- CE Marked

A BEARER HANDLER CAPABLE OF WORKING WITH ALL BEARER TYPES

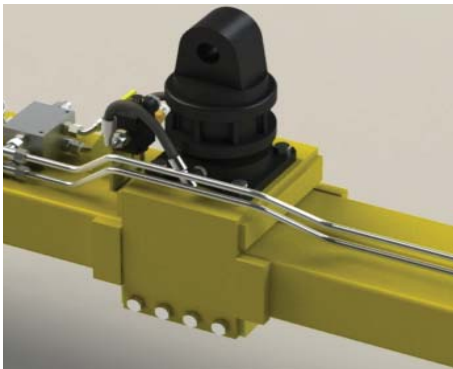
DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- LOLER Test Certificate



BENEFITS

- Handles timbers and bearers from 2,000mm to 4,000mm in length
- Hydraulic rotator for precise positioning



2.4 SLEEPER SPREADER BEAM



Thompson Engineering manufacture a range of sleeper spacing beams for excavators and cranes.

Different designs are available for handling 4, 7, 8, 14 or 28 sleepers according to application, either self powered and radio controlled or linked to the crane's hydraulic system.

All our models feature light yet rigid fabricated subframes, strong lifting legs and rubber contact pads to eliminate damage to the sleepers.

All are powerful enough to gather sleepers together prior to lifting for the most accurate results.



FEATURES

- Strong and Robust
- Check valves on grip cylinders
- Precision Spacing
- Variety of models
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- Handles sleepers up to 350 kg
- Twin jib crane model available
- Optional sleeper gathering feature
- Full Factory Parts Backup
- CE Marked

A WIDE VARIETY OF OPTIONS AND EXCELLENT LOAD TO WEIGHT RATIO.

SPECIFICATIONS

Application	Concrete Sleepers
	Excavator or Crane Mounting
Capacity	4,7,8,14 or 28 sleepers
Power source	Crane or power pack
Control	Crane Auxiliary Pendant Radio Remote
WLL (Safe Working Load)	350 kg/leg
Proof Load (Factory Test)	700 kg/leg

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- Rapid and safe sleeper laying
- Reduces or eliminates working at height
- Accurate sleeper spacing



Specifications given may be subject to change due to our policy of continuous improvement

2.5 STEEL SLEEPER SPREADER / LAYER



The Steel SLEEPER Laying Machine from Thomson Engineering uses a unique mechanism to lay sleepers fast and accurately.

It incorporates a 6-pack load deck with integral walking floor system to handle packs of sleepers.

The laying mechanism can place a pack of ten sleepers in under ten seconds.

Precision sleeper spacing or simple pack splitting options.

Custom models available including self loading and self propelled versions.



FEATURES

- Strong and Robust
- Unique multiple pack handling system
- Wide variety of options to suit different applications and budgets
- Precision laying or simple pack splitting
- Self powered option
- Self propelled option
- Self loading option
- Full Factory Parts Backup
- CE Marked

A FAST, SIMPLE, ACCURATE WAY OF LAYING STEEL SLEEPERS WITH MANY OPTIONS AND NO MANUAL HANDLING

SPECIFICATIONS

Weight	3,200 kg
Weight (Precision version)	3,800 kg
WLL (Safe Working Load)	6,000 kg
Mechanism	Cam Operated

Max. Hyd.. Pressure	190 Bar
Min. Hyd.. Pressure	90 Bar
Handle Operating Force (M)	50 N
Body Colour	08E51 Yellow
Moving Parts	Signal Red

Dimensions and weights vary according to specification

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate
PADS No.094/013028



(some models only)

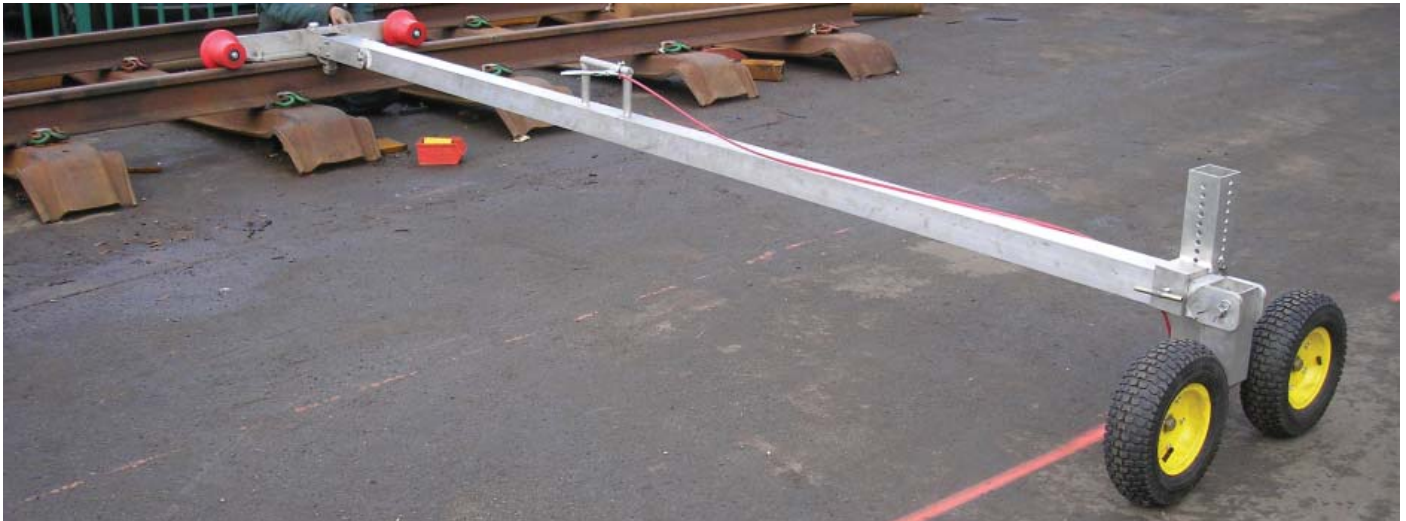


BENEFITS

- Robust, reliable mechanism
- Easy to maintain
- Variety of options including precision spacing
- Custom versions available



2.6 TRACK LINE MARKER



The Thomson Track Line Marker complements our range of sleeper handling machines and attachments.

Using standard road-marking spray cans this device enables its operator to easily and accurately mark the track bed for sleeper position.

A robust 5-roller guide runs on the adjacent line to ensure the accuracy and consistency of alignment.

Two soft pneumatic tyres on the other end of the device roll easily to make the device almost effortless in use.



FEATURES

- Strong and Robust
- 5 point rail guide
- Twin pneumatic ballast wheels
- Uses standard road marking cans
- Central push handle
- Quickly assembled / dismantled
- Full Factory Parts Backup
- CE Marked

A QUICK AND ACCURATE WAY TO MARK OUT SLEEPER LINES

SPECIFICATIONS

Weight	40 kg	Body Colour	Natural
Weight (heaviest part)	14.5 kg	Construction	All aluminium alloy
Max distance to line	6,000 mm		

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate



BENEFITS

- Quick, simple and accurate
- Heavy-duty yet light weight aluminium alloy construction



Specifications given may be subject to change due to our policy of continuous improvement

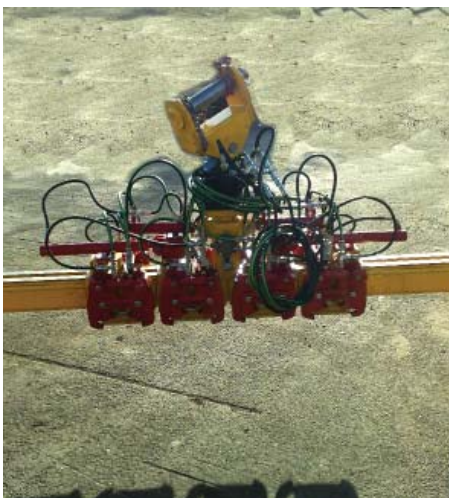
2.7 SONNEVILLE BLOCK LAYER



Sonneville Blocks, used in slab track construction, are easily and safely handled and positioned using the Thomson Sonneville Block Layer.

Hydraulic grabs, hydraulic spacer cylinders and a hydraulic rotator mean that the whole operation is precisely and easily controlled from the cab of the host machine.

Work hardening steel jaws and oil impregnated bronze bearings, heavy duty sliders and a robust main beam mean that this device is built to last.



FEATURES

- Strong and Robust
- Hydraulic Rotator
- Hydraulic Jaws
- Hydraulic Spacing
- Load sensing valve switches hydraulic function from spreader to grip function
- Work hardening steel jaws
- Oil impregnated bronze bearings
- Full Factory Parts Backup
- CE Marked

A SAFE, RELIABLE AND ACCURATE WAY TO SPACE AND LAY SONNEVILLE BLOCKS.

SPECIFICATIONS

Weight	410 kg	Max. Hyd.. Pressure	190 Bar
WLL (Safe Working Load)	500 kg	Min. Hyd.. Pressure	90 Bar
Proof Load (Factory test)	1,000 kg	Body Colour	08E51 Yellow
Mechanism	Hydraulic	Moving Parts	Signal Red
Services required	2, reversible		
O/A Height	800 mm		
O/A Width	420 mm		
O/A Length	2980 mm		

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- No manual handling of blocks
- Fast, accurate positioning
- Strong and reliable



2.8 STEEL SLEEPER PACK GRAB



Thompson Steel Sleeper Pack Grabs are of a unique design which guarantees an even pressure is applied to all the sleepers in the pack regardless of the type and width of sleeper.

This means that there is no risk of crushing sleepers which can easily happen with a plate grab.

A 10,000kg rated rotator and twin hydraulic cylinders with safety check valves are standard fitment. Pressure control valve and load sensing lock valve can be fitted as optional extras.

Suitable for 1m, 1435mm and 1600mm gauge sleepers.

SPECIFICATIONS

Weight	450 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Scissor Action
Max Pack Height	950 mm
Max Pack Width	450mm



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	100 Bar
Body Colour	08E51 Yellow

FEATURES

- Unique design evenly grips all sleepers
- Check valves on hydraulic cylinders
- Oil impregnated bronze bushes
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 1999
- 2,000 kg WLL
- 4,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A PURPOSE DESIGNED STEEL SLEEPER PACK GRAB FOR ALL STEEL SLEEPER AND PACK SIZES

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



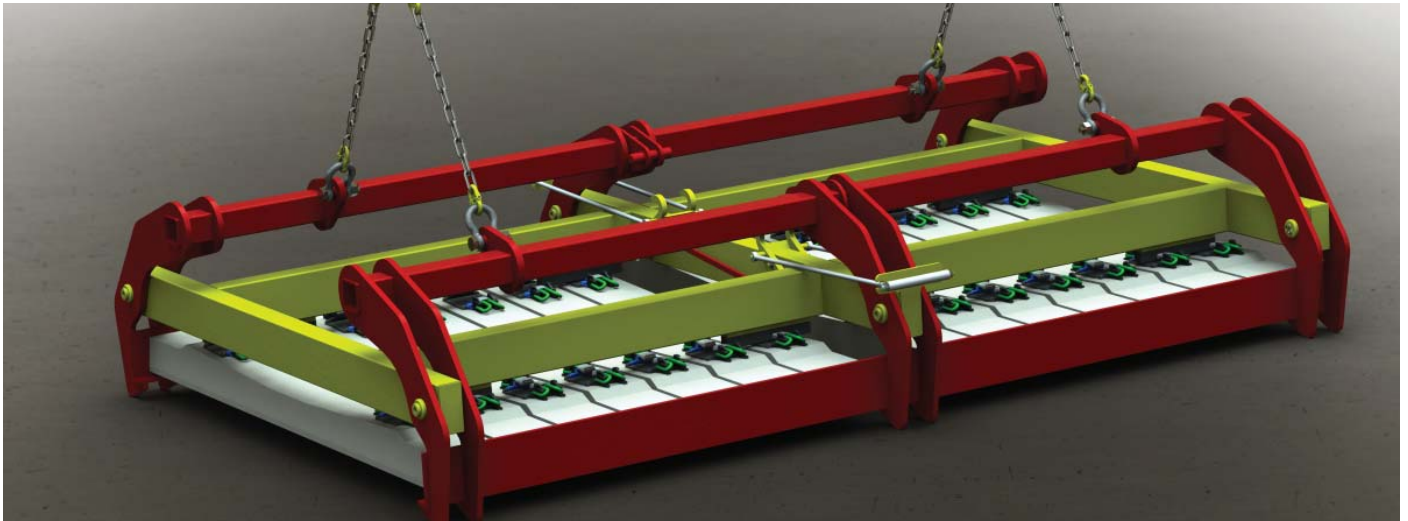
BENEFITS

- Even load on all sleepers to eliminate risk of crushing
- Handles all steel sleeper types and gauges
- Purpose designed



Specifications given may be subject to change due to our policy of continuous improvement

2.9 BULK SLEEPER LOADING GRAB



Loading bulk quantities of sleepers onto trains and trucks is fast, accurate and easy with Thomson Sleeper Loading Grabs.

Three versions are available - automatic, semi-automatic and manual latching all in a variety of sizes to accommodate up from 1 to 60 sleepers per lift.

No hydraulic, pneumatic or electrical connections are required and the grabs can be used with single and twin-hook cranes.

The model shown here is the manual version designed to load 14 sleepers per lift on a twin hook gantry crane.



FEATURES

- Even grip on all sleepers
- No need for hydraulic or other service
- All steel welded construction
- Long design life
- Minimal servicing
- Manual, semi and fully-automatic versions
- Sizes form 1 to 60 sleepers
- Single and multiple layers
- Full Factory Parts Backup
- CE Marked

A SAFE, RELIABLE AND ACCURATE WAY TO SPACE AND LAY SONNEVILLE BLOCKS.

SPECIFICATIONS

All units are built to order to customers' specifications.

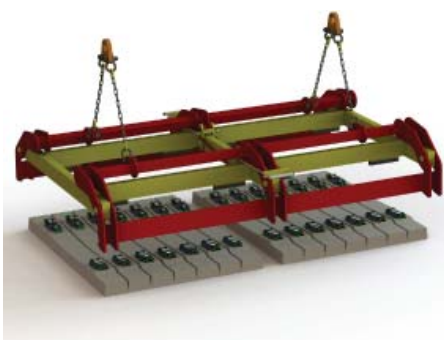
All units are proof load tested to at least 150% of design load and are CE marked and LOLER certificated at the factory.

Frame Colour
Moving Parts

08E51 Yellow
Signal Red

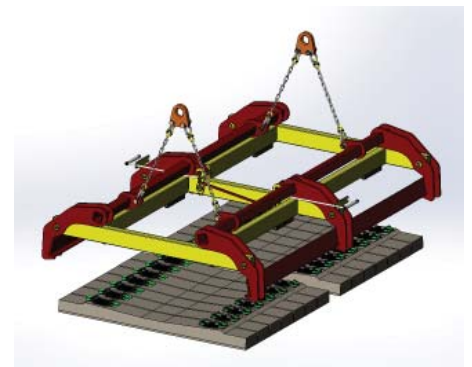
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate

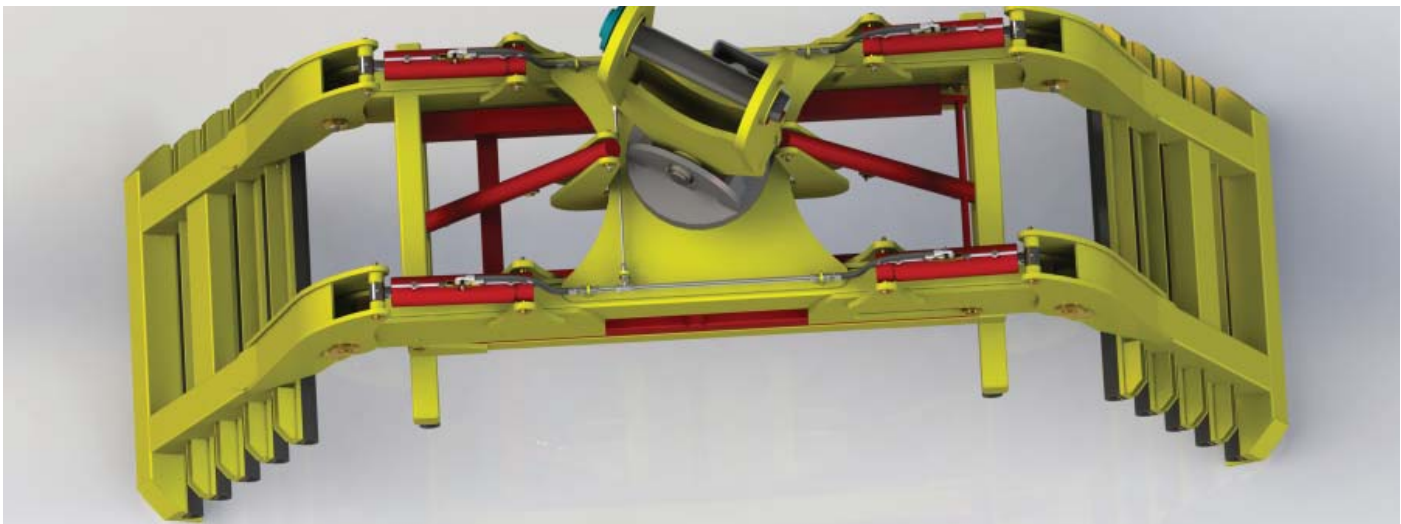


BENEFITS

- Rapid loading of trains and trucks
- No hydraulic, electric or pneumatic power required
- Purpose designed for heavy duty use



2.10 CONCRETE SLEEPER PACK GRAB



Thompson Concrete Sleeper Pack Grabs have a unique design which allows them to be quickly and easily adjusted to handle 1, 2, 3, 4 or 5 layers of sleepers.

The unique, hydraulically-adjusted top plate allows the grab to be set for the required number of layers in a matter of moments.

With a 10,000kg Safe Working Load this is an extremely heavy duty unit which can be fitted with standard or heavy duty rotators and adapter heads to suit excavators up to 50 tonnes.

The standard model handles up to 25 sleepers in 5 layers.

SPECIFICATIONS

Typical unit for 25 sleepers:

Tare Weight	3,600 kg
WLL (safe working load)	10,000 kg
Proof Load (factory test)	20,000 kg
Mechanism	Fully hydraulic
Sleeper Length	2,500 mm
Pack width	1,500 mm

Max. Hydraulic Pressure	210 Bar
Min. Hydraulic Pressure	100 Bar
Frame Colour	RAL 1028 Yellow
Moving Parts	Signal Red

FEATURES

- Handles up to 5 layers
- Rubber buffers protect sleepers
- All steel welded construction
- Long design life
- Hydraulic adjustment
- 10,000kg SWL
- Other sizes available
- Single and multiple layers
- Full Factory Parts Backup
- CE Marked

A PURPOSE DESIGNED CONCRETE SLEEPER PACK GRAB FOR USE WITH HEAVY EXCAVATORS



DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

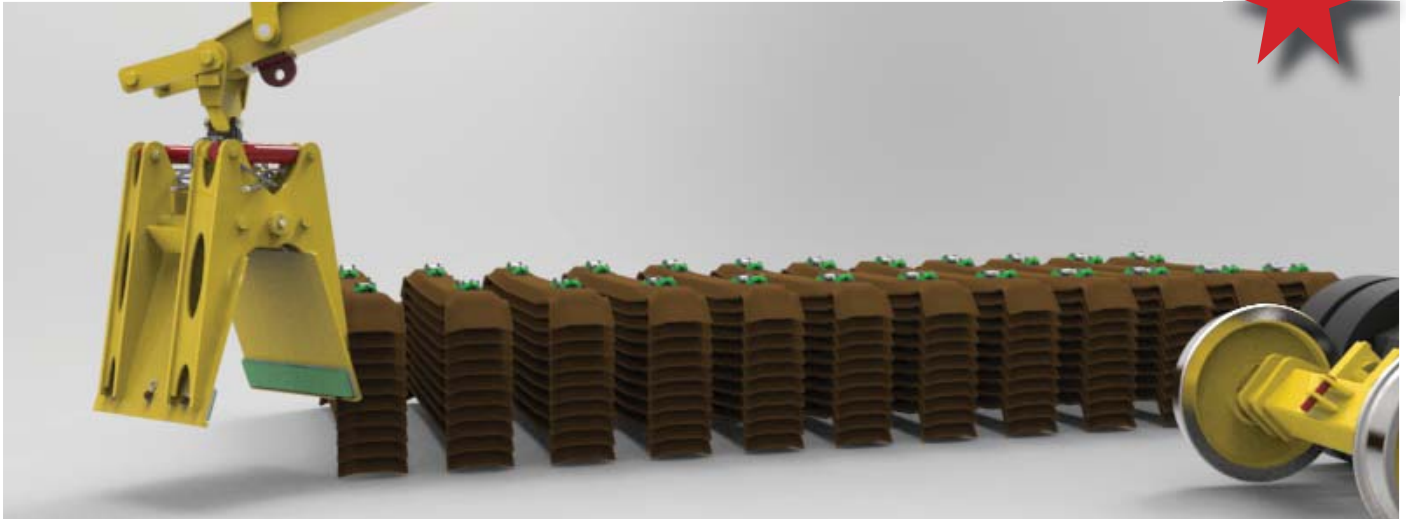
- Rapid loading of trains and trucks
- No hydraulic, electric or pneumatic power required
- Purpose designed for heavy duty use



Specifications given may be subject to change due to our policy of continuous improvement

2.11 PLATE GRAB

New!



The Thomson Plate Grab is designed for handling short lengths of rail, packs of steel sleepers and single concrete sleepers.

The only plate grab to come with easily removable soft gripper pads which prevent damage to concrete sleepers.

Jaws open wide for stability in transport yet close to touch for gripping small items.

Available with jaw heights of 400mm, 600mm or 800mm and a variety of rotators and adapters to suit all machines and cranes.

SPECIFICATIONS

Typical unit for 25 sleepers:

Tare Weight (typical)	850 kg
WLL (safe working load)	1,250 kg
Proof Load (factory test)	2,500 kg
Mechanism	Fully hydraulic
O/A Width	800 mm
Jaw Max Opening	950 mm
Adapter Mount	Std 6 bolt flange



Max. Hydraulic Pressure	210 Bar
Min. Hydraulic Pressure	90 Bar
Body Colour	08E51 / RAL 1028 Yellow
Hyd. Cylinders	Signal Red
Soft Pad	800mm x 140mm

FEATURES

- Steel jaw lip
- Urethane pads for concrete
- Hydraulic Rotator
- Two pin or one pin adapter heads
- Heavy duty welded construction
- Check valves on cylinders
- 1,250 kg SWL
- Three jaw heights available
- Full Factory Parts Backup
- CE Marked

A HEAVY DUTY PLATE GRAB FOR SLEEPER AND GENERAL PURPOSE HANDLING

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Certificate



BENEFITS

- Range of sizes available
- High Grip Force
- Quick fit pads for concrete sleepers
- General purpose heavy duty handler



For News, Technical Documents, and Downloads including
Certificates and Specification Sheets head to:



www.thomsonrail.com

SECTION 3: TRACK PANEL HANDLING EQUIPMENT

Thomson Engineering developed the very first hydraulic track panel lifting beam for Road Rail Excavators in 2000. Initially these were used exclusively for recovering lengths of scrap track quickly and safely during rail renewal operations.

Today many different track panel handling operations are carried out including the handling of new and old panels in a variety of lengths, by single machines or in tandem lift operations.

Whatever the operation, Thomson Engineering has a panel handling solution.

Our first design of panel beam has developed into the Universal Lifting Beam, the industry standard solution for tandem lifting of track panels. From this beginning we now have an extensive range including low-headroom, remote control and gantry based tandem lifting solutions.

Another recent addition is a panel beam with roller jaws for use in the tandem movement of plain line panels by tracked gantry machines. This allows for slight differences in the speed of the machines when manoeuvring without straining the beams.

In recent times there has been a move towards using larger lifting machines to handle panels as single lift operations. Most commonly this is carried out in stock yards, loading and unloading the delivery trains but our new short panel grab also makes on-site single lifting a viable option.

The biggest challenge with handling long track panels in a single lift format comes from balancing the load. Our latest development, the Megabeam, tackles this by incorporating a hydraulic sliding adjustment of the beam to balance the load.

The Megabeam's unique design features don't end there though: it also has a unique grip system for the panel which hooks under the rail using sliding jaws. This system allows the same beam to handle plain line panels, rails and S+C panels without any adjustment or alteration.



Loading an 18m Track Panel using a Thomson Megabeam

SECTION 3: VISUAL GUIDE

	DESCRIPTION	PAGE
	Universal Lifting Beam for Tandem Lifting A 10,000kg capacity heavy duty lifting beam for track panels and rails.	A40
	Low Headroom Panel Beam for Tandem Lifting Where headroom is restricted this beam is the solution for tandem lifting of track panels.	A41
	Switch and Crossing (S & C) Lifting Beams Pre-fitted to switch and crossing panels these beams almost eliminate delays in slinging panels.	A42
	Radio Controlled Panel Beam Where no hydraulic service is available on the crane the built-in power pack and radio remote control make these beams the ideal solution.	A43
	Small Panel Handler For handling panels up to 6,000 kg in a single lift with hydraulic rotator for precise handling.	A44
	Heavy Panel Lifter Loading, unloading and handling panels up to 12,000kg in a single lift this heavy-duty attachment is the first choice.	A45
	Megabeam For handling plain line and switch panels up to 16,000 kg in a single lift with hydraulic rotator for precise handling and built in load balancing system.	A46
	Special Track Panel Equipment All our products are designed and built in-house so that special adaptations and configurations can easily be accommodated or innovative systems created.	A47

3.1 UNIVERSAL LIFTING BEAM



The Thomson Universal Lifting Beam is the industry standard device for tandem lifting of track panels.

Rated to 10,000kg Working Load each beam is factory tested to 20,000kg and designed to withstand even higher dynamic loads.

Built-in pressure control and automatic locking of the jaws whilst lifting ensures that this beam is extremely safe in use.

The jaws themselves can be rotated to convert this beam into a rail beam.

Hydraulic rotator version available.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinders
- Bronze bushes in jaws
- Rotating Jaw Assemblies
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2000
- 10,000 kg WLL
- 20,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

THE INDUSTRY STANDARD PANEL LIFTING BEAM FOR TANDEM LIFT OPERATIONS

SPECIFICATIONS

Weight (spec. shown)	380 kg
WLL (Safe Working Load)	10,000 kg
Proof Load (Factory test)	20,000 kg
Mechanism	Fully Hydraulic
Indication	Visible Jaws
O/A Height (spec. show)	575 mm
O/A Width	350mm
O/A Length	1820 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate
PADS No. 094/002028



BENEFITS

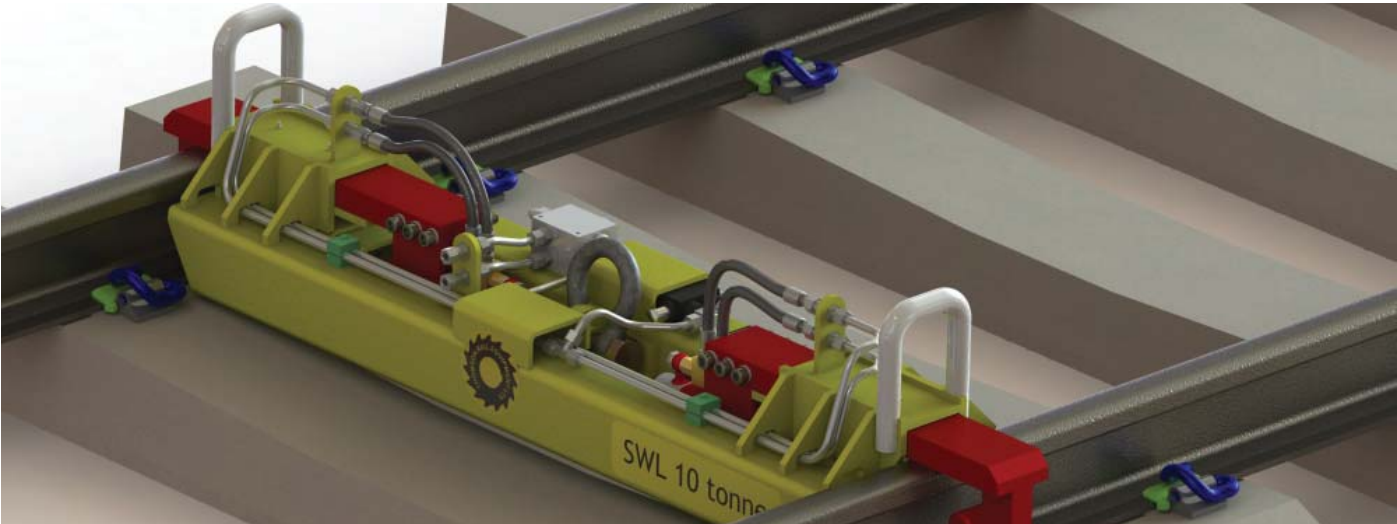
Proven strength, reliability and durability.

Variety of configurations available

Can be used as a rail beam.



3.2 LOW HEADROOM PANEL BEAMS



Where track panels have to be recovered and stacked under live overhead equipment, every inch of headroom is vital.

The Thomson Engineering Low-Headroom Panel Beams have a hitch point just a few millimetres above the level of the rail head, maximising headroom.

With a Safe Working Load of 10 tonnes, load sensing safety valves and check valves on both cylinders these beams are the safe answer to panel handling in low-headroom situations.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinders
- Shielded pipework to prevent damage
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- 10,000 kg WLL
- 20,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

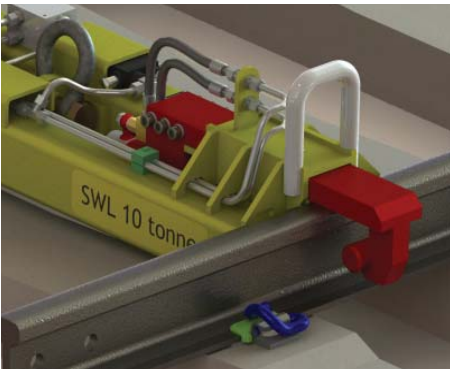
A LOW HEADROOM DESIGN TO GIVE EXTRA CAPACITY UNDER OLE.

SPECIFICATIONS

Weight	400 kg	Max. Hyd.. Pressure	210 Bar
WLL (Safe Working Load)	10,000 kg	Min. Hyd.. Pressure	90 Bar
Proof Load (Factory test)	20,000 kg	Body Colour	08E51 Yellow
Mechanism	Sliding Jaw	Moving Parts	Signal Red
O/A Height	400 mm		
O/A Width	360mm		
O/A Length	1630 mm		

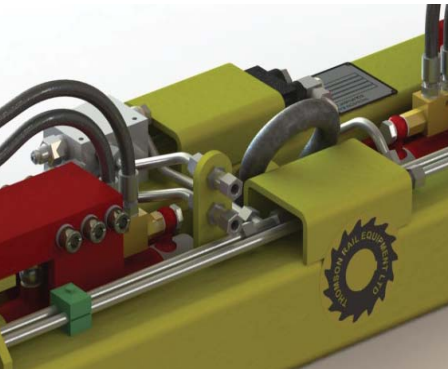
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- Easier working under OLE.
- Fail-safe operation.
- High strength to withstand the heavy duty use associated with modern RRV's



Specifications given may be subject to change due to our policy of continuous improvement

3.3 S & C LIFTING BEAMS



Handling Switch and Crossing panels presents a number of challenges as the panel must not be allowed to flex significantly during the lift.

This can be overcome by using a long rigid lifting beam to carry the panel but it can take a long time to fix and balance the attachment chains.

Thomson Engineering produce fully adjustable, light weight adapter beams which can be pre-fitted to any part of the panel.

Prototype units were tested to twenty tonnes during development proving the strength and durability.



FEATURES

- Strong and Robust
- Lift under rail foot
- Fits any part of S+C panels
- Fixed lifting points
- Pre-fit and pre-set to suit site lifting beam
- Full Factory Parts Backup
- CE Marked

PRE FITTED TO S+C PANELS TO PROVIDE KNOWN LIFTING POINT POSITIONS AND ELIMINATE LOAD SLINGING DELAYS

SPECIFICATIONS

Weight	80 kg
WLL (Safe Working Load)	350 kg
Proof Load (Factory test)	700 kg
Mechanism	Manually Set
O/A Height	375 mm
O/A Width	140mm
O/A Length	2500 mm

Fully welded, sectional, galvanized steel construction

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- Galvanized for long life
- Quick and easy to pre-fit
- High strength
- Massive saving of time on site



3.4 RADIO CONTROLLED PANEL BEAMS



The Thomson Radio Controlled Panel Beams are self powered and remote controlled.

For use where the crane has no auxiliary hydraulic service these radio controlled, self powered beams also incorporate load sensing valves to prevent accidental release of the load.

Manual override of radio controlled main valve and auxiliary hand pump with umbilical hoses can also be provided for operating the beams in the event of a radio or engine failure.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinder
- Load sensing safety valve
- Quick change power pack
- Hand pump for emergency use
- 10,000 kg WLL
- 20,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A PRACTICAL SOLUTION TO PANEL HANDLING WHERE NO AUXILIARY HYDRAULIC SERVICE IS AVAILABLE

SPECIFICATIONS

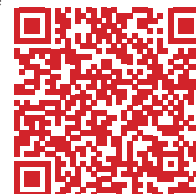
Weight	350 kg
Weight (Power pack only)	32 kg
WLL (Safe Working Load)	10,000 kg
Proof Load (Factory test)	20,000 kg
Mechanism	Cam Operated

System Hyd.. Pressure	120 Bar
Control	Radio / hand lever
Lever Operating Force	15 N
Body Colour	08E51 Yellow
Moving Parts	Signal Red

O/A Height	570 mm
O/A Width	400mm
O/A Length	2900mm

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



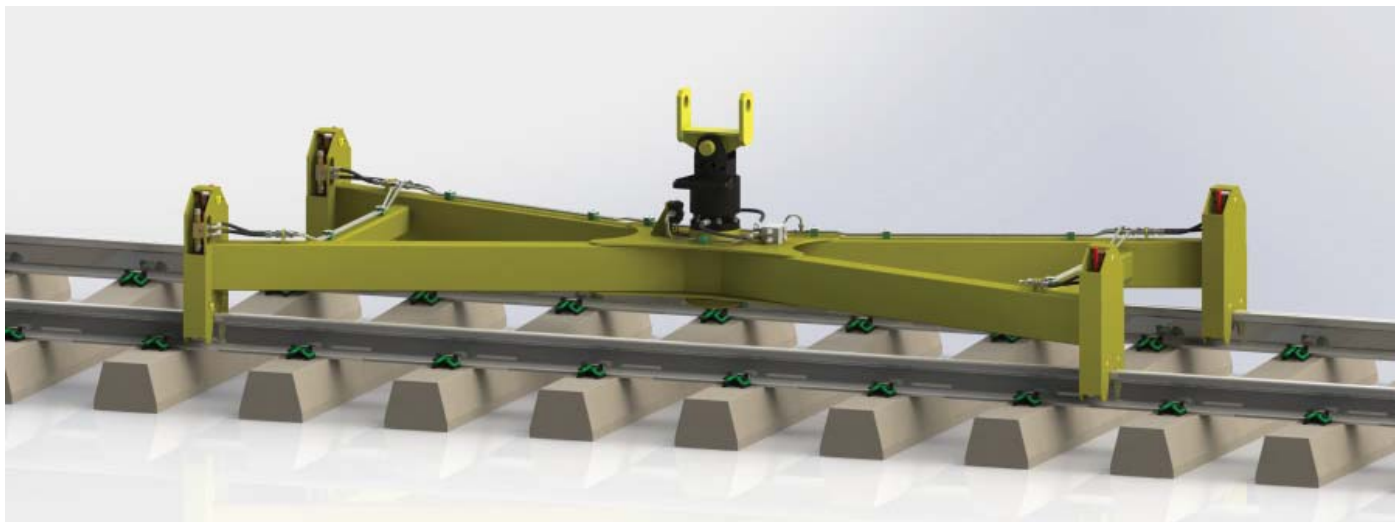
BENEFITS

- Simple push button remote operation
- Reliable engines
- Long running time between re-fuelling
- Auxiliary service outlet



Specifications given may be subject to change due to our policy of continuous improvement

3.5 SMALL PANEL HANDLER



Handling track panels up to 10m long and 6,000kg in weight is easily and quickly done using the Thomson Small Panel Handler.

At 4.5m long this beam minimises deflection of the panel.

Its heavy duty 10,000 kg capacity hydraulic rotator gives the operator precision control of the beam and load.

Each jaw unit incorporates a 'Red-Flag' indicator to alert the operator to the status of the jaws.

Like all Thomson products this beam is designed for long-term heavy-duty operation



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinder
- Fail-Safe Cam Mechanism
- Bronze Bushed Jaws
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Built-in Pressure Control
- 6,000 kg WLL
- 10,000 kg Proof Load
- Minimises Panel Deflection
- Red-Flag indicators
- Full Factory Parts Backup
- CE Marked

A HEAVY DUTY PANEL BEAM FOR PLAIN LINE PANELS UP TO 10M LONG

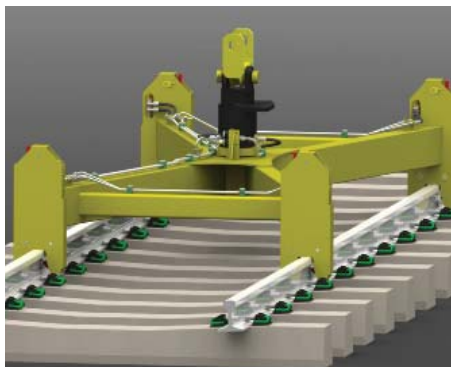
SPECIFICATIONS

Weight (typical)	590 kg
Rotator SWL	10,000 kg
WLL (Safe Working Load)	6,000 kg
Proof Load (Factory test)	10,000 kg
Mechanism	Cam Operated
Indication	'Red Flag' Indicator
O/A Height	650 mm
O/A Width	1,900mm
O/A Length	4,600 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

Cam mechanism means no linkage to stick.

Fully enclosed mechanism means reduced damage.

High strength means the device will withstand the heavy duty use associated with modern RRV's



3.6 HEAVY PANEL LIFTER



For plain line panels up to 20m long, weighing up to 12,000 kg the Thomson Heavy Panel Lifter is the solution to single lift handling.

The Heavy Panel Lifter has all the safety features of our lifting beams: load sensing safety valve, pressure control, check valves on all cylinders and a significant design safety factor.

This all adds up to a powerful and reliable tool built for long service.

This beam can be ordered with straight or arched centre section, a variety of lengths and gauges.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinder
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2008
- 12,000 kg WLL
- 24,000 kg Proof Load
- Pressure Control Valve
- Prototypes tested to 20 tonnes
- Full Factory Parts Backup
- CE Marked

A WELL PROVEN HEAVY-DUTY PANEL LIFTING SOLUTION

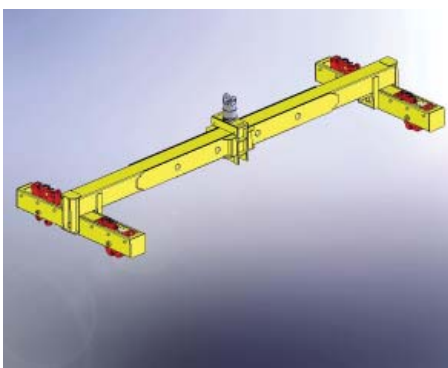
SPECIFICATIONS

Weight (typical)	2000 kg
Rotator Capacity (options)	16,000 kg
WLL (Safe Working Load)	12,000 kg
Proof Load (Factory test)	24,000 kg
Mechanism	Hydraulic jaws
Construction	3 Section
Length (typical)	6m

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

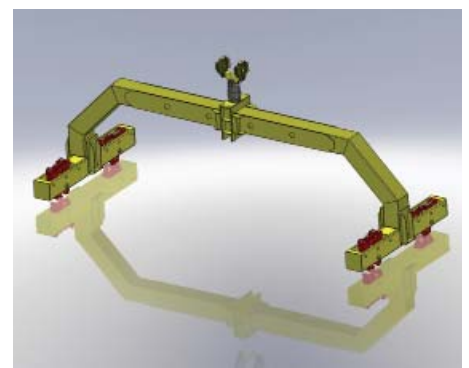
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- Powerful, precise operation
- Fully enclosed mechanism means reduced damage.
- Designed for use with heavy lifting machines.



Specifications given may be subject to change due to our policy of continuous improvement

3.7 MEGABEAM



The Megabeam is unique. No other beam handles plain line and S+C panels. No other beam has built in load balancing capability. No other beam features an interchangeable rotator system.

Thomson Engineering's Megabeam has a Safe Working Load of up to 16,000 kg and can stretch to 6m long to minimise panel deflection.

The hydraulic telescope function and the unique grip system on each end of the Megabeam are all individually adjustable to balance and level the load.

The unique grip design copes with panels and single rails too!

SPECIFICATIONS

Weight	3850 kg
WLL (Safe Working Load)	16,000 kg
Proof Load (Factory test)	20,000 kg
Mechanism	sliding grips
Application:	Single rail
	Plain Line Panels
	S+C Panels
Rotator	+/- 45 degree
	Quick change fitment



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	125 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

FEATURES

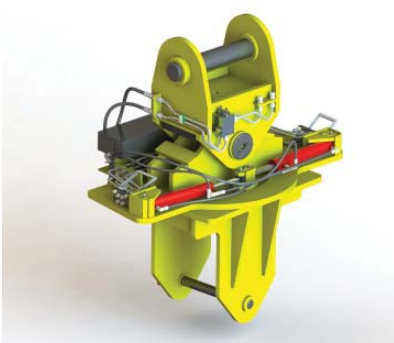
- Strong and Robust
- Fully protected hydraulic cylinders
- Hydraulic telescope function
- Hydraulic load levelling function
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- 16,000 kg Max WLL
- 20,000 kg Factory Proof Load
- Quick Change Rotator
- Full Factory Parts Backup
- CE Marked

A SINGLE SOLUTION TO PLAIN LINE AND S+C PANEL HANDLING.

WILL ALSO HANDLE SINGLE RAILS.

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate

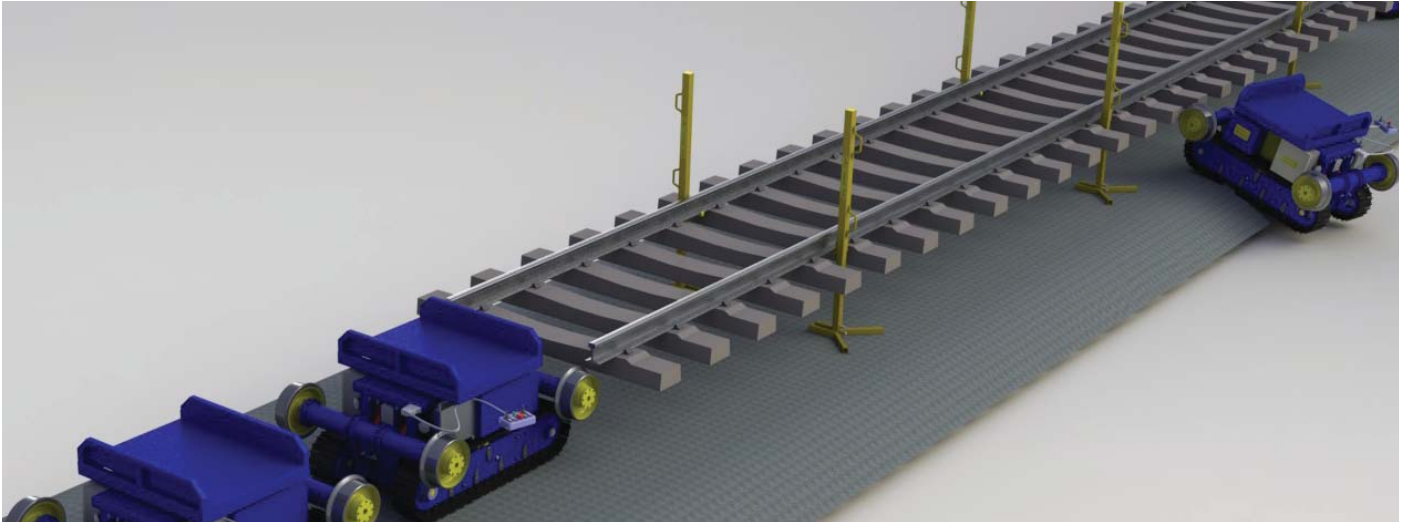


BENEFITS

- One man loading.
- No working at height.
- Powerful and precise operation.
- Controls can be integrated into machine control levers.



3.8 SPECIAL TRACK PANEL EQUIPMENT

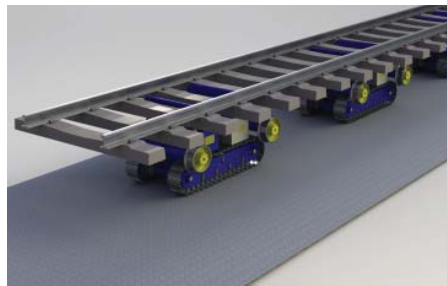


At Thomson Engineering Design we specialise in the design and manufacture of innovative equipment.

We have designed and produced a wide variety of machines for moving, handling, aligning and lifting track and S+C panels of all types.

Our in-house design and virtual prototyping facilities allow us to massively reduce the amount of re-work normally required in the development of new products.

Our extensive factory and testing facilities allow us to be a one-stop-shop for innovation.



EXAMPLES

- Panel lifting jacks
- Rail threader
- Rail lifting trolley
- Rail knocking trolley
- Combination lifting / knocking trolley
- Panel alignment machines

FACILITIES

Solid modelling
Finite Element Analysis
Fluid Flow Analysis
Non-Linear Analysis
Drafting to ISO and BSI standards
Weld Procedure Development
Load, Impact and Fatigue Testing
Technical Authorship Software

In-house production facilities for equipment and modules up to 16m x 3m x 3m and weighing up to 20 tonnes.

Fully equipped machine shop, fabrication and sheet metal workshops, wiring, hydraulic and mechanical assembly and testing facilities.

DOCUMENTATION

As a minimum, all equipment is supplied with:

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

Clear visual presentation of concept designs.

Virtual prototyping greatly reduces development time.

In house design, build and test facilities allow full control of quality and delivery.



Specifications given may be subject to change due to our policy of continuous improvement

SECTION 4: BALLAST HANDLING EQUIPMENT

Whether you are involved in the preparation or refurbishment of the track bed, dealing with wet spots, marking out for track laying or clearing top ballast ready for tamping there is a Thomson Engineering product for every stage.

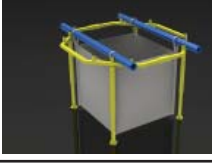
Use our geotextile handlers to help lay even the heaviest geosand textiles with ease. Lay base ballast accurately and with minimal dust and waste using our Ballast Laying Machines or refurbish the existing ballast for steel sleepers using our Ballast Scarifier.

The Track Line Marker helps to speed up the marking of the ballast for alignment of the new track and, once the track is re-laid, either the Ballast Plough or Sleeper Clearer can be used to ready the track for tamping.

Excavating wet spots means hauling away the contaminated ballast and here the Bag Handling System comes into its own, safely holding the bags open for loading and providing an efficient means to lift and transport the loaded bags.



BALLAST EQUIPMENT VISUAL GUIDE

	DESCRIPTION	PAGE
	High Speed Ballast Plough The most efficient way to clear excess ballast evenly to the ballast shoulder.	A50
	Geotextile Handler Simply lay even the heaviest geosand textile rolls.	A51
	Scarifier Swiftly remove ballast 'memory' by a combination of lifting, levelling and crumbling in a single pass.	A52
	Bag Handling System Combining a unique bag support frame for easy loading of waste ballast and a unique bag handling system.	A53
	Track Line Marker Gauging off the adjacent line the Track Line Marker makes light work of marking out for new sleepers.	A54
	Sleeper Clearer Swiftly remove ballast from the mid section of sleepers to improve the visibility for tamper operators.	A55

4.1 HIGH SPEED BALLAST PLOUGH



The Thomson Ballast Plough is designed to remove excess ballast from the centre of the track and place it in the shoulder area.

A single pass at 5 km/hr to 8 km/hr is normally all that is required to leave the track ready for tamping.

The rear wheels are hydraulically adjustable for height and automatic fail-safe brakes are fitted as standard.

Optional extras include marker lights, front wheel hydraulic adjustment and a central baffle plate which can be set to bias the ballast flow to one side or the other.



FEATURES

- High Speed Operation
- Fail-Safe Brakes
- Replaceable Wear Edges
- Marker Lights Option
- Full Factory Parts Backup
- CE Marked

THE FASTEST WAY TO CLEAR THE TRACK READY FOR TAMPING.

SPECIFICATIONS

Weight	1965 kg	Max. Hyd.. Pressure	210 Bar
Brakes	2-wheel Fail-safe	Min. Hyd.. Pressure	150 Bar
Lifting points	1	Body Colour	08E51 Yellow
O/A Height	1170 mm	Moving Parts	Signal Red
O/A Width	2685 mm		
O/A Length	3650 mm		

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Brake Test Certificate
PADS No. 094/016049



BENEFITS

- Rapidly clear track ready for tamping
- Helps to create a ballast shoulder
- No damage to clips and housings
- Reduced risk of tamper damaging sleepers



4.2 GEOTEXTILE HANDLER



Laying geotextiles becomes easier and quicker using Thomson Geotextile Handlers.

Originally developed for use with Geosand textile which is too heavy for manual laying the concept has now been extended and the latest model will handle all geotextile rolls up to 6m wide.

The roll of fabric is supported on steel spindles which run in tapered roller bearings. These are inserted into the ends of the roll using hydraulic cylinders.

The whole operation is practically effortless for the ground staff leading to reduced fatigue and risk.

SPECIFICATIONS

Weight (typical)	375 kg
WLL (Safe Working Load)	1,250 kg
Proof Load (Factory test)	2,500 kg
Mechanism	Hydraulically Operated

O/A Height	735 mm
O/A Width	250mm
O/A Length	1250 - 6250 mm



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow

FEATURES

- Strong and Robust
- Fully protected hydraulic cylinders
- Check valves on cylinders
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2008
- 1,250 kg WLL
- Easy and quick to use
- Handles all geotextiles up to 6m wide
- Full Factory Parts Backup
- CE Marked

REDUCES MANPOWER REQUIREMENT,
REDUCES FATIGUE AND INCREASES
SAFETY

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- One device for all roll types and sizes
- Reduced manpower requirement
- Reduced fatigue - increased safety



Specifications given may be subject to change due to our policy of continuous improvement

4.3 SCARIFIER



When laying steel sleepers it is important to ensure that the ballast is thoroughly scarified.

Proper ballast scarification improves ballast flow and greatly speeds up the tamping operation. It also greatly improves track quality.

The Thomson Ballast Scarifier incorporates special tines which lift and break up the ballast, a levelling blade to smooth the surface and a crumbling roller to break up any clods of contaminated ballast.

This device can be specified for tractor three-point linkage mounting (as shown) or for fitment to an excavator.

SPECIFICATIONS

Weight (typical)	650 kg	Max. Hyd.. Pressure	210 Bar
		Min. Hyd.. Pressure	140 Bar
Fitment	3 point linkage or Excavator	Body Colour	08E51 Yellow
Mechanism	Lift tines Levelling blade Crumbling Roller		



FEATURES

- Overlapping tines for full-width operation
- Hydraulically adjustable levelling blade
- Crumbling Roller
- Full Factory Parts Backup
- CE Marked

A ONE PASS BALLAST SCARIFIER

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan

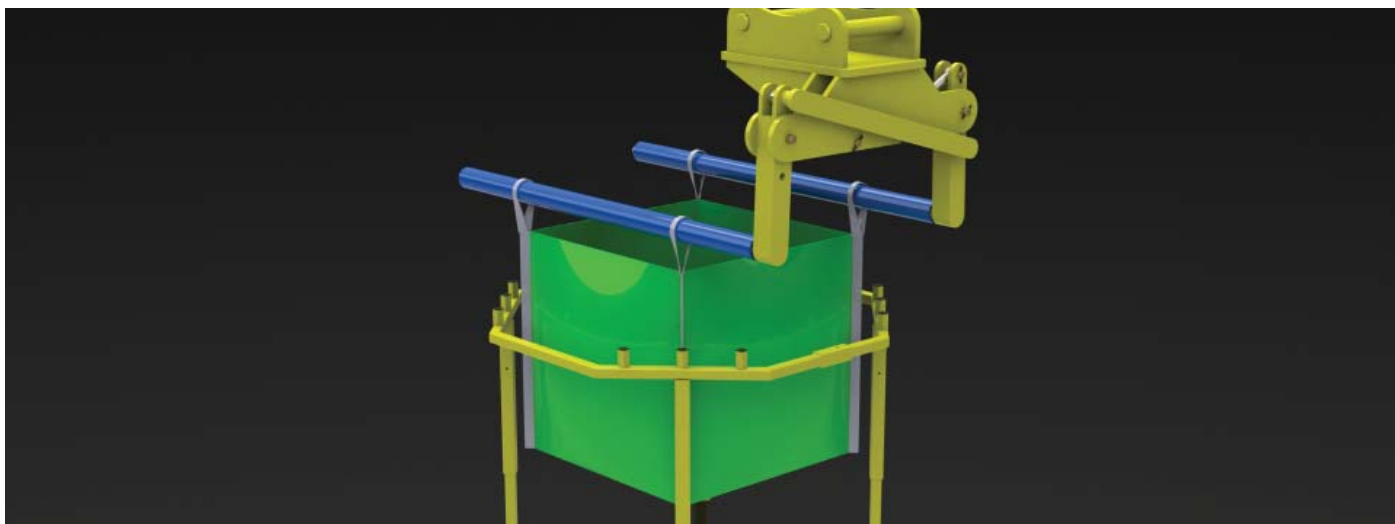


BENEFITS

- Rapid and thorough ballast scarifying
- Better ballast flow in tamping
- Quicker scarifying - three operations in one pass
- Full width operation - nothing is missed



4.4 BAG HANDLING SYSTEM



The Thomson Bag Handling System consists of a purpose designed loading frame and a special hydraulic fork lifting attachment.

Whilst loading the bag it is securely held in a frame with spring-loaded legs which allows the bag to take up any shape without overloading any of the lifting straps.

Once loaded the fork attachment, fitted to an excavator, is used to lift and transport the bag.

The bag support frame quickly breaks down into small sections for easy transport in a works van.



FEATURES

- Hydraulically adjustable fork spacing
- Tapered forks for easy insertion into bag support tubes
- Uses standard bulk bags
- Spring loaded legs on bag holder frame prevent overloading of bag loops.
- Full Factory Parts Backup
- CE Marked

A SAFE WAY OF LOADING AND HANDLING BULK BAGS

SPECIFICATIONS

Weight (fork attachment)	350 kg
Weight (Bag Frame)	45 kg
WLL (Safe Working Load)	1,000 kg
Proof Load (Factory test)	2,000 kg

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar

Body Colour	08E51 Yellow
Cylinder	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate
PADS No's. 094/001302 to 001307



BENEFITS

A safe way of supporting a standard bulk bag whilst loading

An integrated system for loading and lifting



Specifications given may be subject to change due to our policy of continuous improvement

4.5 TRACK LINE MARKER



Using standard road marking spray cans, the Track Line Marker gauges off the adjacent line to accurately mark the ballast bed for sleeper laying.

A combination of guide wheels and rollers ensure that the Track Line Marker accurately follows the existing track.

A simple lever on the central hand grip controls the spray can nozzle allowing the operator to paint continuous or intermittent markings.

The position of the marked line is fully adjustable and the device breaks down into sections for transport.

SPECIFICATIONS

Weight	40 kg
Weight (heaviest part)	14.5 kg
Max distance to line	6,000 mm



Body Colour	Natural
Construction	All aluminium alloy

FEATURES

- Strong and Robust
- 5-point rail guide
- Twin pneumatic ballast wheels
- Uses standard road marking cans
- Central push handle
- Quickly assembled / dismantled
- Full Factory Parts Backup
- CE Marked

A QUICK AND ACCURATE WAY TO MARK OUT SLEEPER LINES

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate



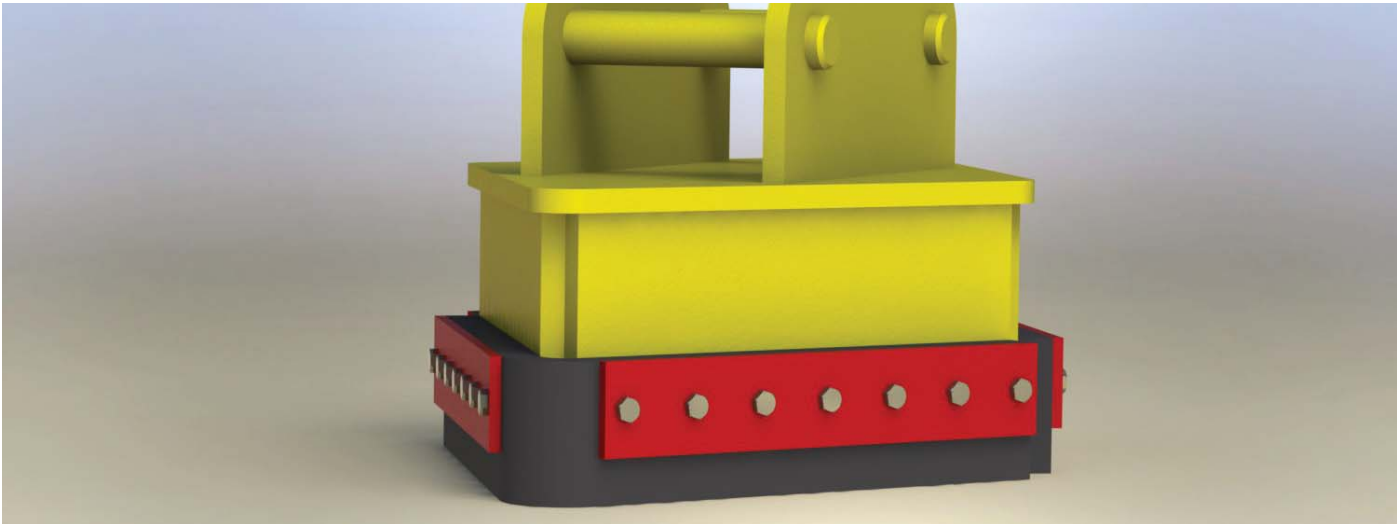
BENEFITS

Quick, simple and accurate

Heavy-duty yet light weight aluminium alloy construction



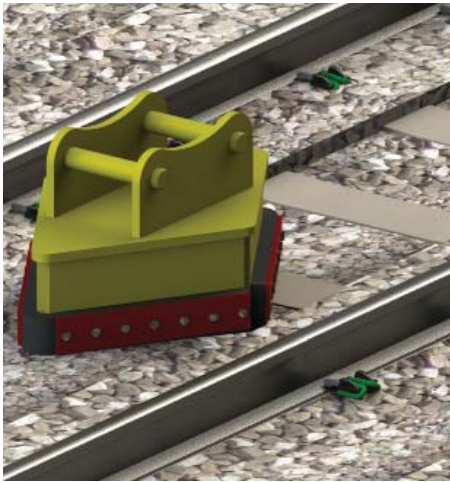
4.6 SLEEPER CLEARER



The Thomson Sleeper Clearer is designed for rapidly and safely exposing the centre section of sleepers to make them visible to the tamper operators.

Heavy rubber blades and a V-shaped profile ensure complete clearance of the sleeper tops without risk of damage to the concrete surfaces.

Rubber blades are hard wearing and easy to replace.



FEATURES

- Strong and Robust
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Full Factory Parts Backup
- CE Marked

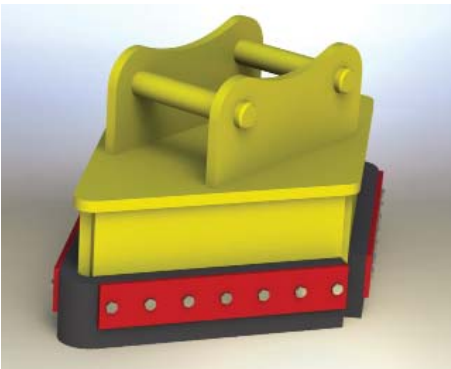
A QUICK AND SAFE WAY TO EXPOSE SLEEPER TOPS

SPECIFICATIONS

Weight	280 kg	Body Colour	08E51 Yellow
O/A Height	555 mm	Wear Parts	Signal Red
O/A Width	735 mm		
O/A Length	1080 mm		

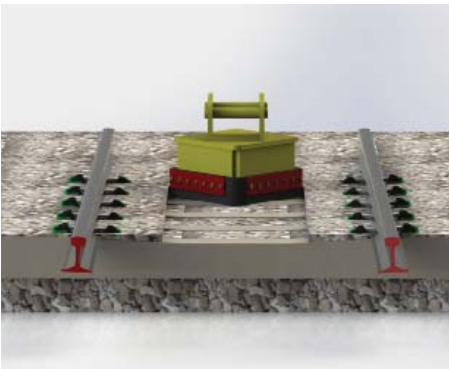
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate



BENEFITS

- Low cost device
- High speed operation
- Massive all steel construction - built to last



Specifications given may be subject to change due to our policy of continuous improvement

SECTION 5: CLIPPING MACHINES

Thomson Engineering have been producing clipping machines since 2001 and are the UK's leading supplier of RRV Fastclip attachments with over 60 machines in full time use.

Building on the success of the Fastclip attachment we now produce a range of machines for Fastclip type clips and two machines for E-clip series fasteners.

The latest addition to the range is the new FE Mk2 machine. This new machine has an unparalleled specification: not only can it clip, de-clip and lift sleepers but it can be placed on the track and loaded into vehicles using manpower alone thanks to its unique modular construction.

The FE Mk2 is also designed to work in hot and cold climates and at very high work rates. Three models are available: pedestrian propelled, self propelled semi-automatic and fully automatic. The top specification machine incorporates a computer control and monitoring system to ensure that every sleeper is correctly clipped in the very shortest possible time, automatically deploying the sleeper lifter where required and requiring the minimum of effort on the part of the operator.

At the other end of the spectrum the E-clip tool is a new solution to an old problem. E-clips have always been difficult to mechanise. The E-clip tool gets round this by providing a powered clip insertion solution in a hand tool to give the reliability of a hand tool with the ease of a machine. It can also lift the sleeper if required too!

We have also made a wide variety of special clipping machines for customers who have particular requirements. Perhaps you need only to clip up after re-stressing but want to do so at very high speed - we have a solution.

Whatever you want in a clipping machine we have the capability to provide a cost-effective, reliable machine.



Fastening PR 401 Clips with the Thomson PR 401 clipper

CLIPPING MACHINES VISUAL GUIDE

	DESCRIPTION	PAGE
	Mk3 Fastclip Attachment The most popular fastclip attachment for RRV's due to its simple operation and robust design	A58
	Mk2 FE Clipping Machine A modular machine for clipping, de-clipping and sleeper lifting. This unique machine can be split into hand-portable sections for easy on and off-tracking.	A59
	FD Clipping Machine A low cost, full function fastclip machine for small renewals and maintenance tasks.	A60
	PR401 Clip Attachment Quickly and effortlessly install and remove PR401 clips - one of the most popular rail fastenings in the world.	A61
	E-clip Power Tool Using hydraulic power to make light work of installing E-clips the Power Tool also incorporates a sleeper lifting feature.	A62
	Specialised Clipping Machines Special purpose one-off machines designed and built to order.	A63
	Mk3c Combination Clipping Attachment Clip or de-clip Fastclip FC, Fastclip FE and Pandrol PR401 and E-clips. Also equipped with removable sleeper lifting attachment.	A64

5.1 MK3 FASTCLIP ATTACHMENT



The Thomson Mk3 Fastclip attachment is the industry standard machine in the UK.

Simple to set and operate, hard to break and simple to service and maintain this machine is always popular with operators.

The machine is equipped with the fastest and simplest to use sleeper lifter in its class.

In the hands of a skilled operator rates of 60 sleepers per minute are regularly achieved on rail stressing work.

The latest models can be specified for 3rd and 4th rail operation.

SPECIFICATIONS

Weight	2250 kg
Braking System	Fail Safe, 2 wheels
Clipping Mechanism	Fully Hydraulic
De-Clipping	Fully Hydraulic
Sleeper Lifting	Single Control
O/A Height	1230 mm
O/A Width	2200mm
O/A Length	2195 mm



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

FEATURES

- Extremely Strong and Robust
- Fully protected hydraulic cylinders
- Simplest machine to set
- Simplest machine to use
- Low operator fatigue
- High reliability
- Long life wear parts
- Wide range of optional extras
- Can be specified for 3rd & 4th rail
- Full Factory Parts Backup
- CE Marked

THE MOST POPULAR MACHINE OF ITS KIND WITH OWNERS AND OPERATORS

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate
Brake Test Certificate
PADS No.094/013005



BENEFITS

Suitable for all RRV's

Hydraulic pressure control built in and oil cooling option for high speed use.

Low operator fatigue means reliable results



5.2 MK2 FE CLIPPING MACHINE

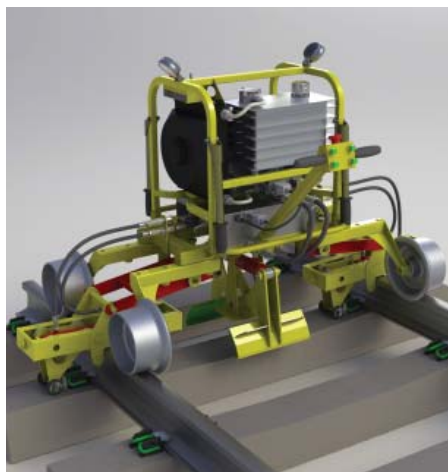


The new FE Mk2 Fastclip machine represents the culmination of ten years of development.

This new machine can work on one rail or both rails to clip or de-clip and can lift sleepers in rail renewals operations.

The machine is entirely hand portable, can be assembled in minutes by just two men and is available in three versions: manually propelled, fully powered and fully automatic.

The top-of-the-range fully automatic machine is computer controlled requiring the minimum of operator input to function.



FEATURES

- Strong and Robust
- Modular design
- Hand portable modules
- Wide variety of options
- Suitable for high temperature climates
- Ideal for all Fastclip types
- Works with concrete and steel sleepers
- Can be specified for 3rd & 4th rail use
- Full Factory Parts Backup
- CE Marked

A UNIQUELY VERSATILE AND USER FRIENDLY MACHINE FOR RENEWALS AND MAINTENANCE OPERATIONS

SPECIFICATIONS

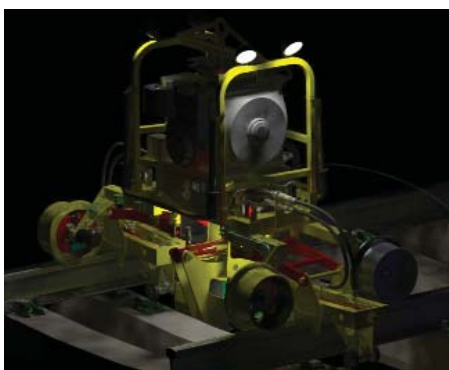
Weight	250 kg
Max Section Weight	48 kg
Max Sleeper Weight	350 kg
Max Sleeper Lift	120 mm
Gauge	1,000, 1435, 1600 mm
O/A Height	1200 mm
O/A Width	gauge + 600 mm
O/A Length	1,050 mm

Engine	6.5 to 20 hp (options)
Operating rate	10 - 40 sleepers /min

Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate
Brake Test Certificate



BENEFITS

One machine for all applications.

Variety of options for different output rates

Modular construction for easy, fast on- and off-tracking



Specifications given may be subject to change due to our policy of continuous improvement

5.3 FD CLIPPING MACHINE



Our lowest cost, full featured machine for Pandrol FC and FD clips, the FD Clipping Machine is a good solution for small maintenance operations.

This machine breaks down into man-handleable sections for easy transport and is fully featured including clipping, de-clipping and sleeper lifting functions.

Although designed for small jobs just one of these machines clipped up 180 km of track on a large re-laying blockade in 2005.



FEATURES

- Low cost full featured machine
- Sleeper Lifter
- Clipping and De-clipping
- Ideal for small sites or occasional use
- Fully hydraulic operation
- Full Factory Parts Backup
- CE Marked

AN IDEAL SOLUTION FOR
MAINTENANCE OPERATIONS

SPECIFICATIONS

Weight	390 kg
Weight Heaviest Part	49 kg
WLL (Sleeper Lifter)	275 kg
Mechanism	Fully Hydraulic
O/A Height	810 mm
O/A Width	690 mm
O/A Length	2060 mm

System Hyd.. Pressure	190 Bar
Engine Power	6.5 Hp
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate



BENEFITS

- Clip or de-clip both rails at once
- Lift sleepers if required
- Sleeper Lifter can be omitted when not required
- Easy to assemble



5.4 PR401-CLIP ATTACHMENT



The Thomson PR401 clip driving attachment is a high output machine designed for long term use.

The machine incorporates a sleeper lifting device and four clip driving arms so that a whole sleeper is clipped in a single operation.

On the front of the machine is a retractable E-clip remover which is capable of removing the clips from more than 5,000m of track per hour.

Work lights and marker lights, powered by an integral battery and re-charged by a large solar cell completes the specification.



FEATURES

- Four point clipping
- Sleeper Lifting
- High Speed De-clipping
- Work and marker lights
- Clip at 200 m/hr
- De-clip at 5,000 m/hr
- Full Factory Parts Backup
- CE Marked

A HIGHLY EFFECTIVE CLIP DRIVER FOR PR401 STYLE PANDROL CLIPS

SPECIFICATIONS

Weight	2500 kg
Mechanism	Hydraulically Operated
O/A Height	1475 mm
O/A Width	1500mm
O/A Length	3000 mm

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- Factory Test Certificate
- Brake Test Certificate



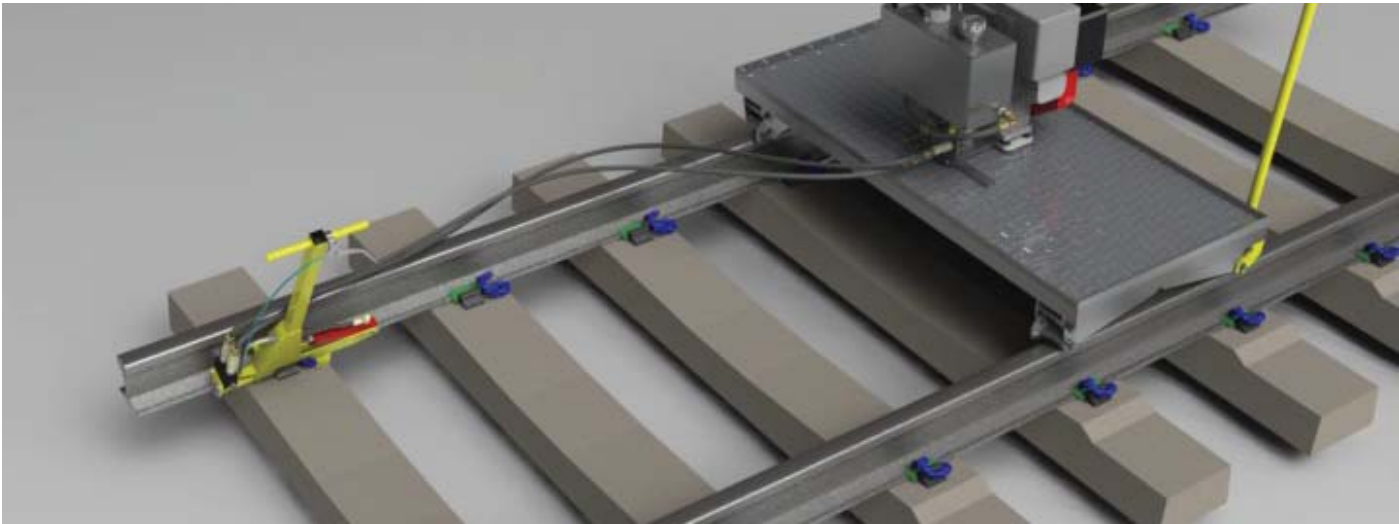
BENEFITS

- High speed clip insertion
- Sleeper lifting capability
- Super-fast E-clip and PR-clip removal



Specifications given may be subject to change due to our policy of continuous improvement

5.5 E-CLIP POWER TOOL



E-Clip systems have to be assembled on-site and the logistics of this operation mean that it is often most efficient to manually install the clips as they are put in place.

The E-clip tool shown here is designed to make this operation quicker and easier for the operator.

A simple-to-use hydraulic driving tool makes light work of clip driving to minimise fatigue and maximise production without altering work procedures.

As well as driving the clip this tool will also lift sleepers up to 15mm where required.

SPECIFICATIONS

Weight (tool)	14 kg
Weight (power pack)	35 kg
Driving Force	15 kN
Operation	Semi-automatic
Mechanism	Hydraulic cylinder

Max. Hyd.. Pressure	190 Bar
Min. Hyd.. Pressure	90 Bar
Hydraulic Supply	Closed Centre
Handle Operating Force (Lift)	250 N
Body Colour	08E51 Yellow
Moving Parts	Signal Red

FEATURES

- Honda or Briggs & Stratton Engine
- Hydraulic drive cylinder
- Housing alignment peg
- Built in sleeper lifter
- Full Factory Parts Backup
- CE Marked

AN INNOVATIVE SOLUTION TO E-CLIP DRIVING



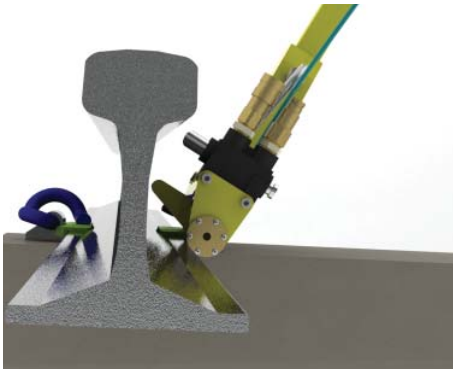
DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- Factory Test Certificate

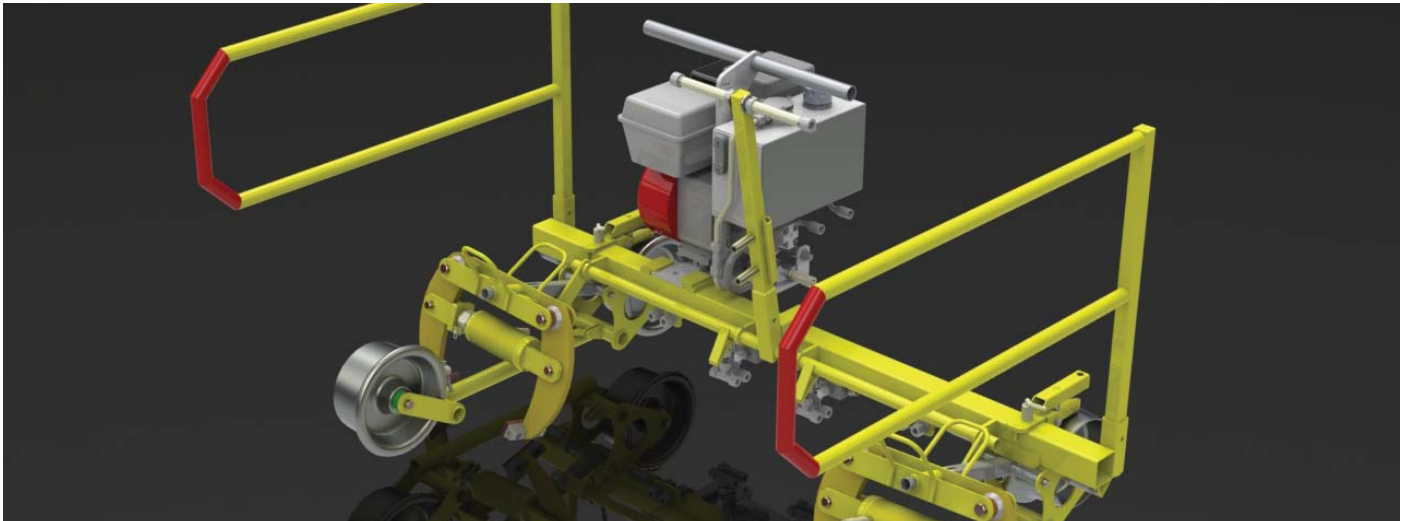


BENEFITS

- Lower Fatigue
- Higher Production
- Simple Operation



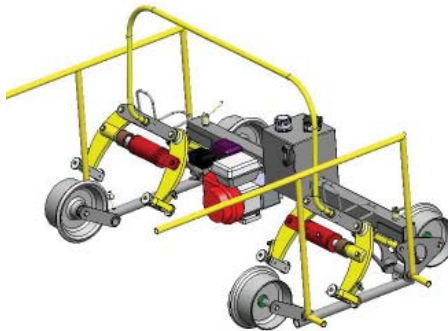
5.6 SPECIALISED CLIPPING MACHINES



Thompson Engineering Design have designed and built many different and highly specialised clipping machines for E-clip, Vossloh, Fastclip and others.

Modular machines which can be carried, assembled and dismantled by one man, miniature lightweight single rail machines, twin rail machines with sleeper lifting capability, high speed, low noise and other specialist requirements have been met by our designers.

If none of our standard machines meets your requirements we will be able to design and build something special.



STANDARD FEATURES

- High proportion of recyclable components and materials
- Briggs and Stratton or Honda Engines
- Hydraulic Operation
- Full Factory Parts Backup
- CE Marked

BESPOKE SOLUTIONS TO
SPECIALISED CLIPPING OPERATIONS

SPECIFICATIONS

All specifications agreed prior to commencement of design.

Full project management with key-stage and progress reporting available.



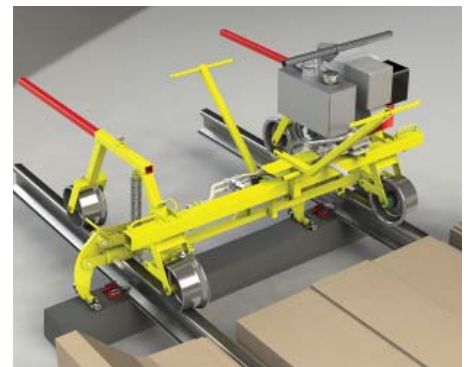
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate
Brake Test Certificate



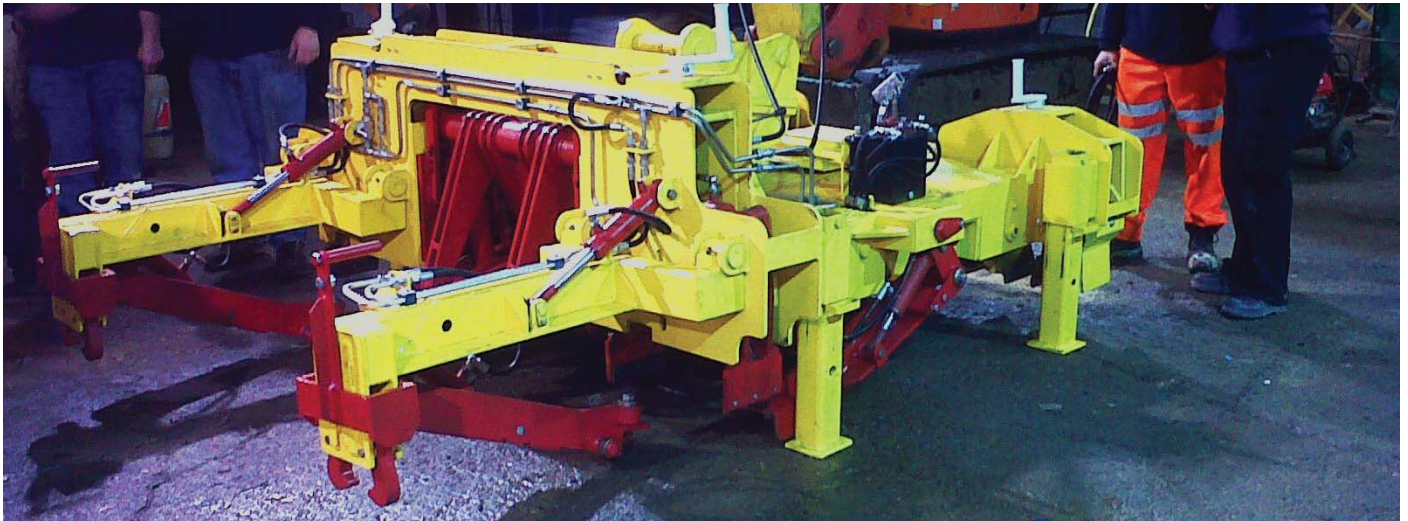
BENEFITS

- Purpose designed and built.
- Bespoke solutions
- Many successful existing designs



Specifications given may be subject to change due to our policy of continuous improvement

5.7 MK3C COMBINATION CLIPPING ATTACHMENT



The Thomson Mk3c combination clipping attachment includes all the features of our latest Fastclip and E-clip machines.

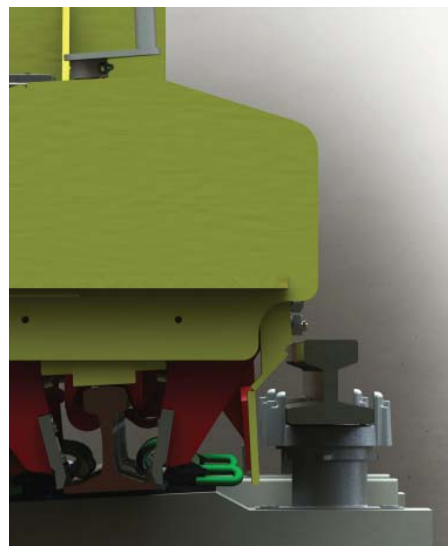
Simple to set and operate, the machine is compatible with DC third rail and can also be used in DC 4th rail areas thanks to its removable sleeper lifting device.

Install and remove E-clips, set and release Fastclips and Fastclip FE, lift low sleepers with a single control and work on DC electrified lines without having to remove the conductor rails.

This machine's versatility promises the greatest potential returns.

SPECIFICATIONS

Weight	2500 kg
Braking System	Fail Safe, 2 wheels
Clipping Mechanism	Fully Hydraulic
De-Clipping	Fully Hydraulic
Sleeper Lifting	Single Control
O/A Height	1350 mm
O/A Width	2200mm
O/A Length	2195 mm



Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

FEATURES

- Extremely Strong and Robust
- Fully protected hydraulic cylinders
- Simplest machine to set
- Simplest machine to use
- Low operator fatigue
- High reliability
- Long life wear parts
- Wide range of optional extras
- Can be specified for 3rd & 4th rail
- Full Factory Parts Backup
- CE Marked

THE MOST VERSATILE CLIPPING MACHINE ON THE MARKET

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate
Brake Test Certificate

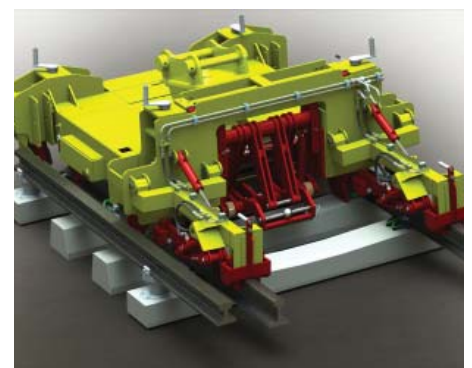


BENEFITS

Suitable for all RRV's

Hydraulic pressure control built in and oil cooling option for high speed use.

Low operator fatigue means reliable results



For News, Technical Documents, and Downloads including
Certificates and Specification Sheets head to:



www.thomsonrail.com

SECTION 6: SPECIAL PURPOSE TOOLS & MACHINERY

Thomson Engineering specialise in the design and manufacture of bespoke solutions to the problems associated with rail maintenance and repair.

Because we design, build and test everything we make in-house we are able to develop unique and innovative solutions to old and new problems.

Many of our most popular products began in this way, our Universal Lifting Beam for instance was the result of a customer request for a means to avoid men having to climb onto trains to unhook chains from track panels. We built the first hydraulic panel beams for Road Rail Vehicles in 2000, today more than 300 are in service in the UK alone.

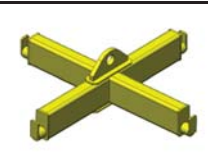
Over the past twelve years we have created literally hundreds of unique bespoke products, many of them as one-off's, for customers throughout the UK, Europe and even Australia and Africa.

In this section we show just a handful of these to illustrate the range of tasks we can tackle.

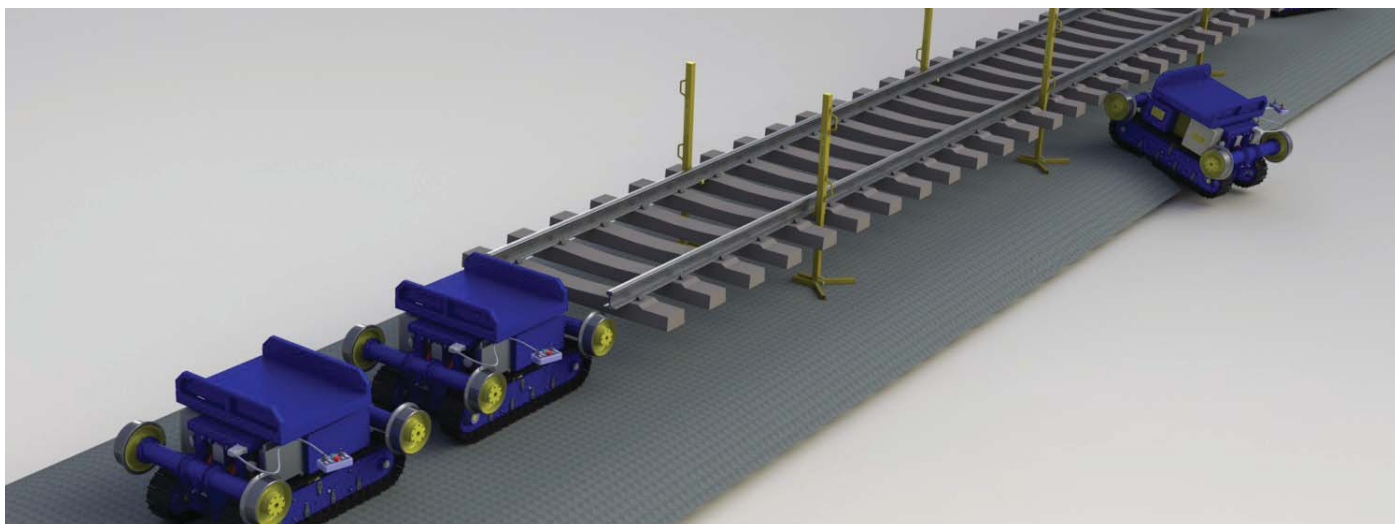
If you want to improve safety, productivity or simply make a hard job easier why not give us a call?



SECTION 6: VISUAL GUIDE

	DESCRIPTION	PAGE
	Multi Purpose Road Rail Vehicle A compact and versatile machine for working in the most restricted site conditions	A68
	Container Flats and Bases Custom built ISO container bases for all purposes	A69
	Signal Post Grab Lift, erect and install fully assembled signal post assemblies using this versatile and dexterous grab	A70
	Bag Carriers Our ever-popular rigid carrier for safely handling bulk bags of ballast and other materials	A71
	Special Purpose Trolleys Bespoke made trolleys for any purpose including powered versions	A72
	Laser Mast Base Fit, adjust and remove laser equipment from dozers without having to climb onto the blade using our hinged laser mast bases.	A73
	Wagon Mounted Crane Designed for simple fitment to all types of rail wagons these cranes can be used in pairs or multiples for handling any length of rail	A74
	Signal Post Crane Lightweight aluminium post crane for servicing and changing coloured light signalling equipment	A75
	Crossing Slab Lifter Specially designed for extracting and re-fitting rubber level crossing slabs	A76
	Towbars, Links and Adapters Standard and custom designed towbars for emergency recovery and general use	A77

6.1 MULTI PURPOSE ROAD RAIL VEHICLE



A concept machine for working in tunnels and areas of restricted access, performing a range of functions within the rail environment.

The base machine is a small but powerful tracked machine with powered rail wheels at each end.

Controlled by a radio or umbilical remote control and with an interchangeable platform and hydraulic power pack outlet.

The machine can provide power for panel jacking and slewing, carry panels or rails or act as a general purpose crane.



FEATURES

- Road / rail operation
- 5,000 kg capacity on deck
- High mobility
- Multi function
- Tandem and multiple operation
- Hydraulic power pack output for jacks and hydraulic tools
- Full Factory Parts Backup
- CE Marked

A COMPACT MULTI-PURPOSE MACHINE WHICH CAN BE EQUIPPED FOR A WIDE VARIETY OF TRACK MAINTENANCE OPERATIONS.

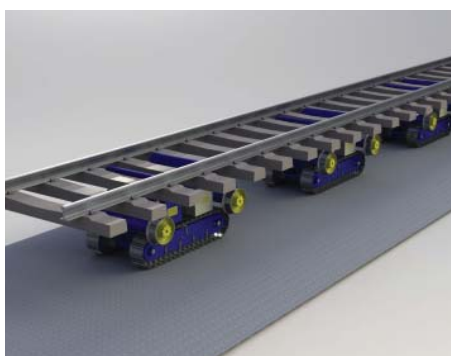
SPECIFICATIONS

Weight (rubber tracks)	2,400 kg
WLL (Safe Working Load)	5,000 kg
Crane duty	3,000 kgm
Power	25 kW
Travel Speed Laden	2.5 km/hr
Max gradient (on tracks)	1:3
Platform Height	1035 mm
Tray Width	1000 mm
Tray Length	1250 mm

Fuel	Diesel
Hydraulic Output	40 l/min
Output pressure	180 Bar
Body Colour to customer requirement	

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER certificate
Factory Test Certificate



BENEFITS

- Work in small spaces
- Multiple applications
- Rapid return on investment through high utilisation



6.2 CONTAINER FLATS AND BASES



Flat container bases, designed to meet the requirements of ISO668 and ISO3864, modified containers for portable workshops or warehouses and container based turnkey equipment.

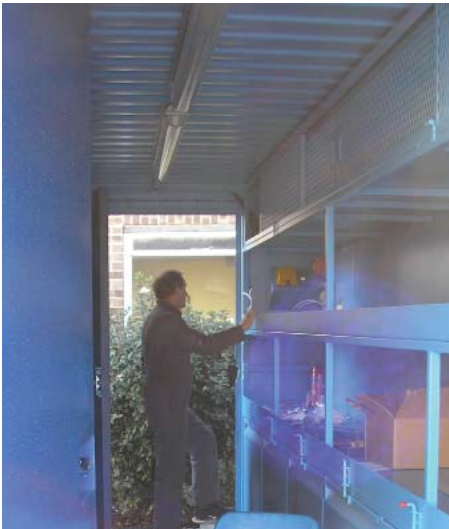
Thomson Engineering Design provides a range of standard container bases and can customise them with superstructures of all types to suit your precise requirements.

A speciality is our twenty-foot container base with handrails and folding steps which is designed for fitment to rail wagons to provide a mobile work platform or load deck.

SPECIFICATIONS

Sizes	10, 20, 30 and 40ft
Dimensions to	ISO 668
Load Ratings to	ISO 668
Handling and Securing to	ISO 3874

Standard finish	Shot blast + paint
Paint (standard)	2 pack Polyurethane



FEATURES

- Fully tested and certified
- No compromise load ratings
- Fully customisable superstructures
- Full Factory Parts Backup
- CE Marked

A FULLY COMPLIANT RANGE WITH A WIDE RANGE OF OPTIONAL FITMENTS

DOCUMENTATION

- User's Manual
- Parts Manual (where applicable)
- Maintenance Instructions
- LOLER Test Certificate



BENEFITS

- Long life and full capacity
- Low deck height
- Tailor made designs



Specifications given may be subject to change due to our policy of continuous improvement

6.3 SIGNAL POST GRAB



The Thomson Signal Post Grab is the ideal solution to handling round and square posts.

The jaws are lined with specially formulated polyurethane pads which give a high level of grip without damaging the galvanized surface of the post.

To save cost, Thomson Engineering can integrate the Signal Post Grab into a redundant tilt-rotator.

Twin grip cylinders protected against hose failure by pilot operated check valves ensure that the grab is safe in operation.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinders
- Bronze bushes in jaws
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2005
- 3,000 kg WLL
- 6,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A ROBUST AND VERSATILE GRAB FOR HANDLING SIGNAL POSTS AND STRUCTURES

SPECIFICATIONS

Weight (Grab Only)	400 kg
Pad Coating	Polyurethane
Range of Grip	90 to 300mm diam.
WLL (Safe Working Load)	3,000 kg
Proof Load (Factory test)	6,000 kg

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	120 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

Powerful grip with soft, high friction pads to minimise damage to surface coatings.

High dexterity for accurate and precise placement.

Small size to maximise applications.



6.4 BAG CARRIER AND MULTI-BAG CARRIER



The Thomson Bag Carrier is available in two sizes, both with a safe working load of 2,000kg.

A strong, simple, light weight design the Bag Carrier is built for long term use and is fully CE marked and LOLER certificated so it meets all the legal requirements.

Bag lifting straps are secured by spring loaded latch plates so that bags can be filled whilst on the Bag Carrier without the risk of the straps coming loose.

The Bag Carrier holds the bag open for easy filling.



FEATURES

- Strong and Light
- Two sizes available
- Proven in Use Since 2007
- 2,000 kg WLL
- 4,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A QUICK, SIMPLE SOLUTION TO THE HANDLING OF BULK BAGS UP TO 2,000KG.

SPECIFICATIONS

Weight (Large)	70 kg
Weight (Small)	45 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Latches	Spring Operated

Body Colour 08E51 Yellow

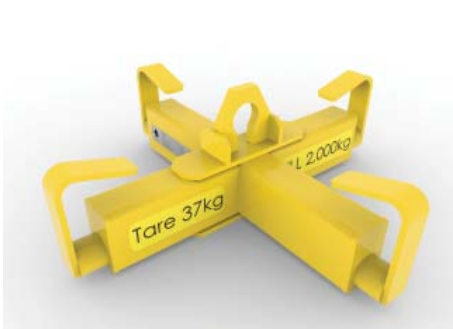
DOCUMENTATION

Operator's / Maintenance Manual
LOLER Test Certificate



BENEFITS

- Fully certificated and tested.
- Simple operation.
- Light weight.



Specifications given may be subject to change due to our policy of continuous improvement

6.5 SPECIAL PURPOSE TROLLEYS



Thompson Engineering Design have made many special purpose rail trolleys.

Each one has been made for a unique application, from the dual gauge rail press handling trolley shown below (bottom right) to the rocket propelled trolley built for the BBC's 'Bang Goes the Theory' (above) which achieved almost 250mph!

We have developed a number of different braking, propulsion and wheel arrangements. We also have the facilities in-house to perform braking and wheel unloading (track twist) testing.

OPTIONS

Single or multi-part chassis in steel, stainless steel or aluminium alloy.

Pedestrian, electric or engine propulsion.

Load sensing or spring brakes.
Cast aluminium, cast steel, cast iron, turned or spun steel wheels.



1m, standard or 1600mm gauge and multi-gauge designs.

A wide variety of powered and hand operated accessories can be built in.

EXAMPLES

- Push trolley
- Crane Trolley
- Rail Press Trolley
- Power station hopper inspection trolley
- General purpose trolley
- 1 tonne aluminium trolley
- Full Factory Parts Backup
- CE Marked

DOCUMENTATION

Operator's Manual

Parts Manual

Maintenance Plan

LOLER Test Certificate (where relevant)



BENEFITS

- Bespoke designs
- Innovative solutions
- One-off or production quantities



6.6 LASER MAST BASE



Designed by John Pugh this simple device eliminates the need for dozer drivers to climb onto the blade to affix the laser equipment.

Releasing two bolts at the rear of the bracket allows the mast to be hinged down for the safe and speedy fitment of the laser receivers.

The clever bit of John's design is the way that the hinge is designed to tighten on its pin as the mast is erected so that vibration and slack are eliminated.

These devices are available in any colour to suit your machine.



SPECIFICATIONS

Weight (Large)	15 kg	Body Colour	08E51 Yellow
Tilt Angle	90 deg.		or to match machine

FEATURES

- Completely rigid when fixed
- High strength and toughness
- Eliminates working at height
- Safety pin and bolt fixing
- Does not affect the laser operation
- CE Marked

A SIMPLE WAY TO IMPROVE SITE SAFETY

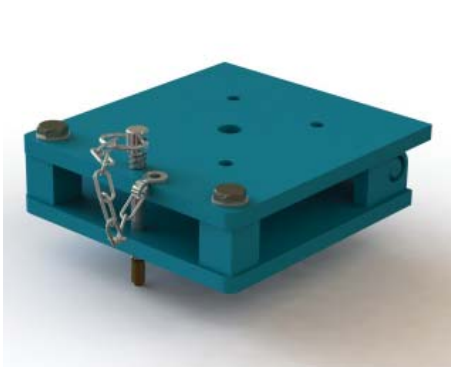
DOCUMENTATION

Installation / Maintenance Manual



BENEFITS

- No working at height
- Simple to use
- Robust and vibration free



6.7 WAGON MOUNTED CRANE



The Thomson Wagon Mounted Crane is designed for handling long welded rail from works trains.

The crane may be set to either side of the subframe, rotated and locked to face along or across the wagon and the jib may be levelled to compensate for track cant. All of these adjustments may be motorised.

When fitted with an electric hoist a hood and fully sealed electrical connections help protect the mechanism from the elements.

Safe working load and jib length can be tailored to suit individual requirements.

SPECIFICATIONS

Weight	According to Spec.
Max Track Cant	223 mm
Cross Slide	Roller and Leadscrew
Safe Working Load	to Spec.



Body Colour	08E51 Yellow
Moving Parts	Signal Red

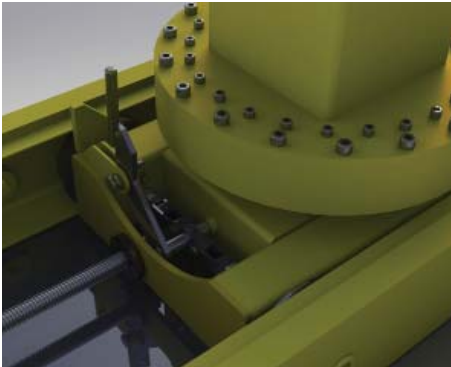
FEATURES

- Strong and Robust
- Fully protected electrical systems
- Bronze bushes in rollers
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Rotating post
- Jib levelling
- Cross travel by leadscrew with latches at either side and centre
- Full Factory Parts Backup
- CE Marked

A ROBUST AND VERSATILE CRANE FOR WAGON MOUNTED INSTALLATIONS

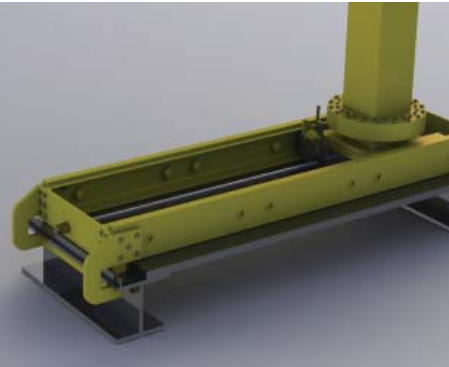
DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- LOLER Test Certificate



BENEFITS

- Bespoke construction to your exact specification
- Manual, Electric or hydraulic powered
- All functions can be powered



6.8 SIGNAL POST CRANE



The Thomson Signal Post Crane makes light work of changing coloured light signal heads, junction indicators and associated equipment.

The crane is made in 1.8m and 0.9m sections which fit together and clamp to the signal post and which can cater for any signal post height.

A high quality certificated hand winch is used to lower the old signal head to the ground and to raise the new one.

The entire structure of the crane is made of a light weight aluminium alloy for ease of carrying.

SPECIFICATIONS

Weight (Complete 7m)	60 kg
Weight (heaviest section)	14 kg
WLL (Safe Working Load)	125 kg
Proof Load (Factory test)	250 kg
Mechanism	Hand winch



APPLICATIONS

Signal Heads
Junction Indicators
Post platform rails

FEATURES

- Strong and Light
- Sectional Design
- Proven in Use Since 2004
- 125 kg WLL
- 250 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A QUICK, SIMPLE SOLUTION TO HANDLING OF HEAVY SIGNAL HEADS AND ASSOCIATED EQUIPMENT

DOCUMENTATION

Operator's / Maintenance Manual
LOLER Test Certificate
PADS No. 094/019176



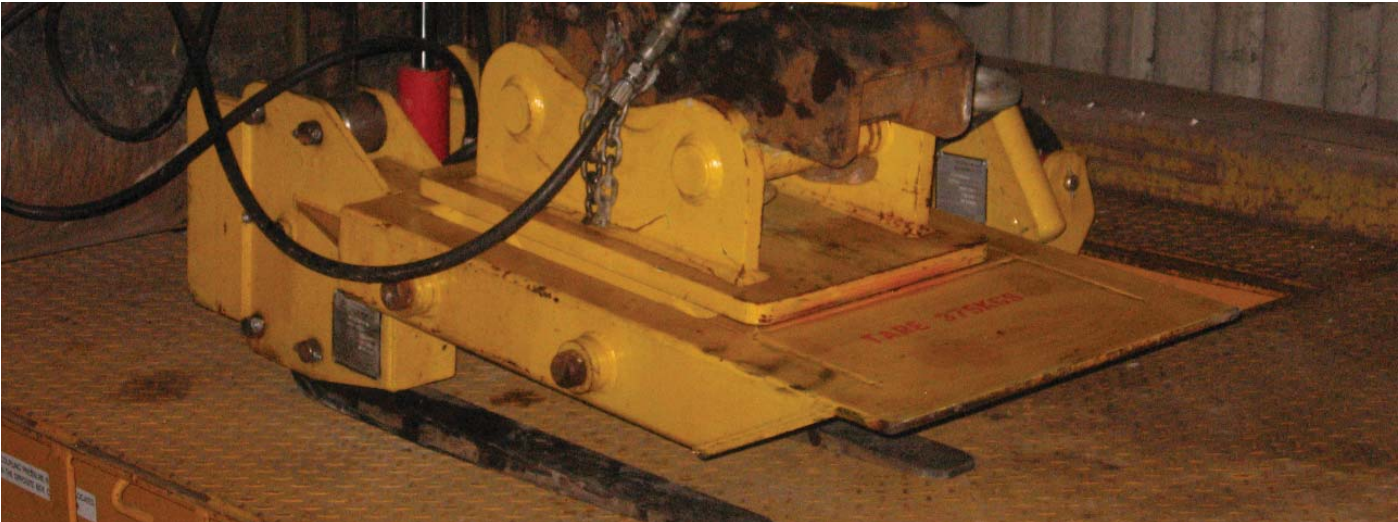
BENEFITS

Fully certificated and tested.
Simple set-up & operation.
Light weight.



Specifications given may be subject to change due to our policy of continuous improvement

6.9 CROSSING SLAB LIFTER



The Thomson Crossing Slab Lifter is designed for the rapid removal and replacement of rubber block level crossings.

The forks hydraulically clamp the crossing slab into the device so that slabs can be stacked on edge and retrieved easily.

When replacing crossing slabs the side and front blades are used to press the slabs firmly into position.

One operator with two men to release the tie rods can remove a two lane crossing entirely in around thirty minutes.



FEATURES

- Strong and Robust
- Fully protected hydraulic cylinders
- Bronze bushes in jaw rollers
- All Steel Welded Construction
- Forged forks
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Proven in Use Since 2005
- 3,000 kg WLL
- 6,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A SAFE AND QUICK WAY TO REMOVE AND INSTALL LEVEL CROSSING SLABS MINIMISING LABOUR AND MAXIMISING SAFETY

SPECIFICATIONS

Weight (Grab Only)	400 kg
Pad Coating	Polyurethane
Range of Grip	90 to 300mm diam.
Safe Working Load	3,000 kg
Proof Load (Factory test)	6,000 kg

Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	120 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate
PADS No, 094/012065



BENEFITS

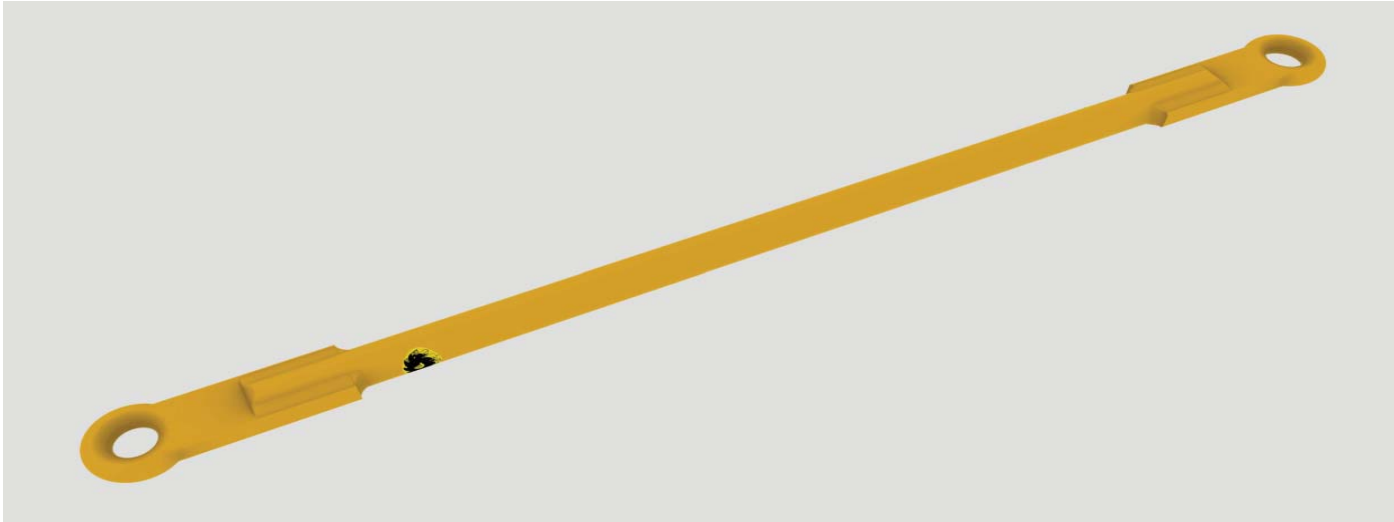
Powerful grip with soft, high friction pads to minimise damage to surface coatings.

High dexterity for accurate and precise placement.

Small size to maximise applications.



6.10 TOW BARS, LINKS AND ADAPTERS



Thomson Tow Bars are made to order allowing us to custom make tow bars to your specifications.

Our standard design is a 2m long bar with forged eyes welded to a high tensile steel centre bar however, custom built towbars for special purposes are frequently produced.

Extra features such as pipe and cable brackets can easily be accommodated and special light-weight designs and extra long lengths are available.

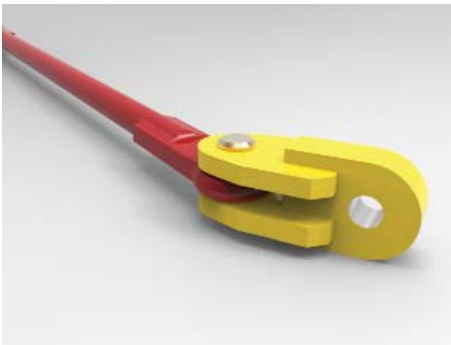
The specifications on this page are for our standard tow bar. Please contact us for other options.

SPECIFICATIONS (STD.)

Weight	42 kg
Finish	Powder Coated
Length (pin centres)	2,000mm
Max tow force	160 kN
Proof Load (Factory test)	200 kN

Options available include:

- Lightweight construction
- Cranked design
- Hose and cable mounts
- Carrying handles
- Adapter links
- Stowage Brackets



BENEFITS

Standard and Custom designs to suit your exact requirements.

Range of accessories available.

Full technical documentation and test reports available

FEATURES

- Strong and Robust
- Custom designs available
- Forged eyes
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- CE Marked

HIGH STRENGTH AND ECONOMICAL TOW BAR FOR EMERGENCY RECOVERY AND GENERAL APPLICATIONS

DOCUMENTATION

Test Certificate

Design Validation Report (if required)



SECTION 7: CABLE HANDLING

Thompson Engineering manufacture a variety of cable storage, handling and laying equipment for use in both the rail and construction sectors.

For the rail sector we provide crane based, trailer or wagon based and integrated trailer systems, all of which can incorporate drum braking and powered drum options.

Our Integrated Drum Handler is the excavator / crane solution to laying cables. A shaft is threaded through the cable drum and then picked up by the crane using the handler cradle.

For heavier drums our Trailer Based Drum Handler will take up to 8,000kg whilst the cable trailer is the ideal solution to cable laying in tunnels and areas of limited clearance, providing a simple way to handle drums up to 3,000kg.

When laying heavy cables to the side of the track a cable thimble suspended from the lifting point of an RRV boom helps to support the cable on its way from drum to trough without effort or risk to the cable.

All our drum carriers can be supplied with power driven or braked shafts to control cable payout and tension if required. On all models the shaft itself runs on ball bearing support rollers so that the drum rolls freely and smoothly: especially useful when handling delicate cables such as fibre optic lines.

Each of these products is made to order so we can accommodate custom requirements.



SECTION 7: VISUAL GUIDE

	DESCRIPTION	PAGE
	Cable Handling Yoke Our most efficient cable handling solution.	A80
	Trailer Based Drum Handler Low rolling friction and adaptable for all drum sizes make this cable drum stand the ideal choice for all cable types including delicate data or optical cables.	A81
	Cable Trailer A completely self-contained cable drum carrier / lifter / dispenser.	A82
	Cable Thimbles Soft Rollers and a simple-to-use design make these cable threaders the first choice for careful handling of delicate and fragile cables.	A83
	Troughing Cable Installer Automatically lift troughing lids, install cable and replace the lids in a single, continuous operation.	A84

7.1 CABLE HANDLING YOKE



The Thomson Cable Handling Yoke is the most efficient way to handle cable drums and to lay cable using an excavator crane.

By withdrawing two retaining pins the drum shaft is released from the Yoke.

Fit the drum shaft to the cable drum and pick it up with the Yoke. Lock the retaining pins and you are ready to lay the cable.

The Yoke can even be fitted with a hydraulic rotator to help position the drum when used just for drum handling. Can be made to suit any range of drum sizes and weights.



FEATURES

- Strong and Robust
- Very quick and simple to use
- All Steel Welded Construction
- High Resistance to Dynamic Loads
- High Resistance to Abuse
- Versions for any range of drum sizes and weights can be supplied
- 6,000 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A REALLY EASY TO USE AND QUICK SOLUTION TO CABLE LAYING

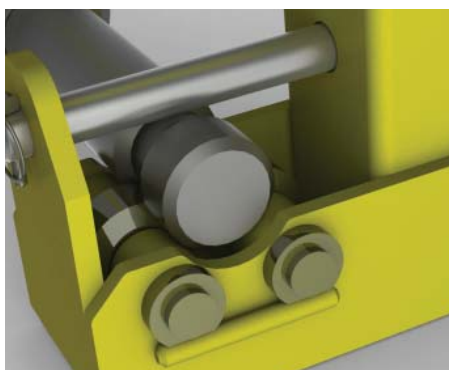
SPECIFICATIONS (STD.)

Weight (typical)	145 kg
Shaft Diameter	80 mm
Max drum width	1,200 mm
Safe Working Load	3,000 kg
Proof Load (Factory test)	6,000 kg

Rotator Version	
Max. Hyd.. Pressure	210 Bar
Min. Hyd.. Pressure	50 Bar
Body Colour	08E51 Yellow

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate

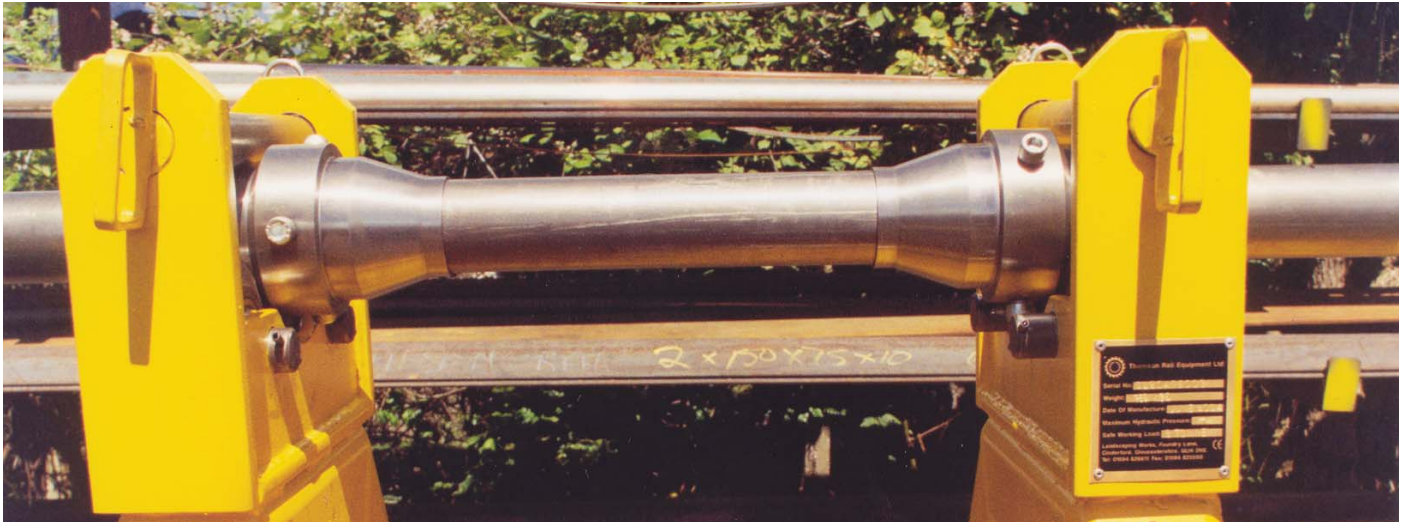


BENEFITS

- Minimises handling time
- Maximises productivity
- High reliability through robust construction



7.2 TRAILER BASED DRUM CARRIER



The Thomson Cable Drum Carrier is designed for use on rail trailers to provide a high strength, low rolling resistance support for cable drums up to 8,000 kg.

The special adapter cones, which can be used with drum shaft holes from 90mm to 200mm, sit on ball bearing rollers making it exceptionally easy to load and unload drums.

Because of the low rolling resistance of this arrangement our Drum Carrier is frequently specified for delicate cables such as fibre optics.

Rigid and turnable bases are available.



FEATURES

- Simple to load and unload
- Adaptable to a wide range of drum sizes
- Braked and powered versions available
- Very low rolling resistance for delicate cables
- Full Factory Parts Backup
- CE Marked

A VERSATILE AND EASY TO USE
CABLE DRUM STAND FOR TRAILER
AND WAGON APPLICATIONS

SPECIFICATIONS

Weight (Complete 7m)	480 kg
Shaft Diameter	80 mm
Drum shaft hole	90 mm to 200 mm
WLL (Safe Working Load)	8,000 kg
Proof Load (Factory test)	12,000 kg
Mechanism	Low Resistance Roller

DOCUMENTATION

Operator's / Maintenance Manual
LOLER Test Certificate



BENEFITS

- Low rolling resistance
- 8,000kg capacity
- Wide range of drum sizes



Specifications given may be subject to change due to our policy of continuous improvement

7.3 CABLE HANDLING TRAILER



The Thomson Cable Trailer is an ideal solution for laying cable in restricted working locations such as tunnels.

Manually operated hydraulic lift arms mean that this trailer is totally self-contained.

The Cable Trailer can load itself with drums placed in the four-foot and it incorporates the same low rolling resistance drum shaft supports as our other drum handlers making it ideal for delicate cables as well as heavy power lines.

Automatic, fail-safe brakes are fitted as standard.



FEATURES

- Self Loading
- Precision Height Control
- Low Rolling Resistance Shaft
- Powered and braked versions available
- 3,000 kg WLL
- 4,500 kg Proof Load
- Full Factory Parts Backup
- CE Marked

A FAST AND EASY WAY TO LAY CABLES IN RESTRICTED AREAS

SPECIFICATIONS

Weight	1,900 kg
Brakes	Fail-safe on 2 wheels
Shaft Size	80mm diam.
Safe Working Load	3,000 kg
Proof Load (Factory test)	4,500 kg

System Hyd.. Pressure	210 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red

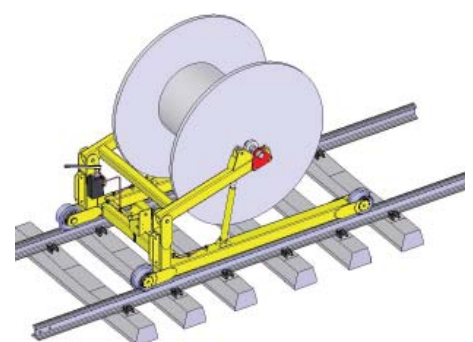
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate

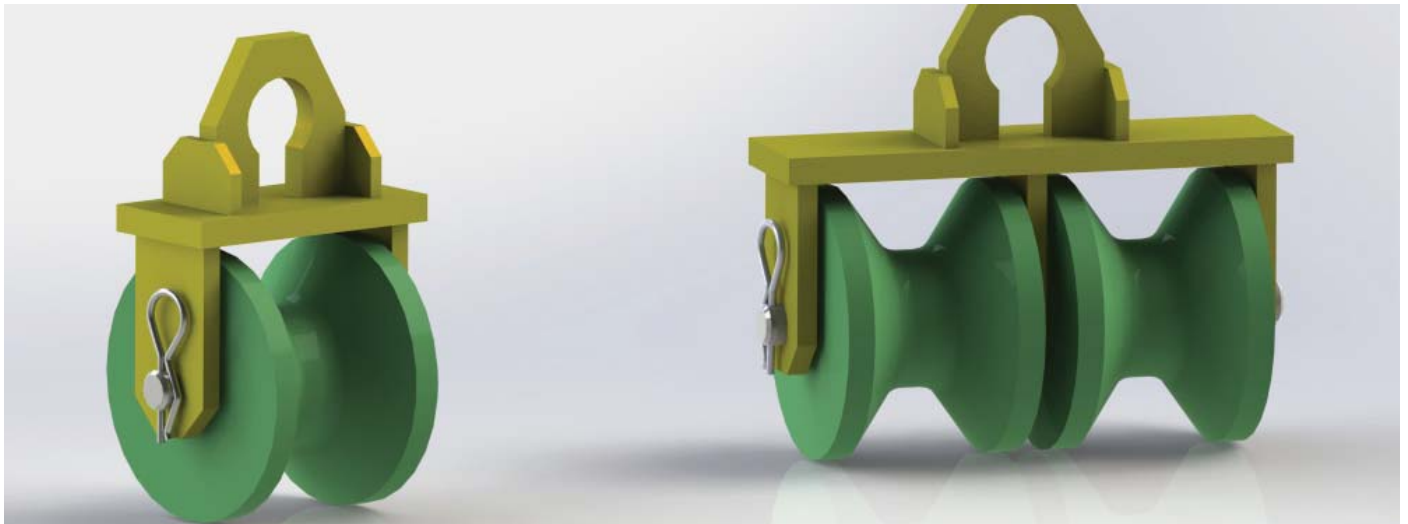


BENEFITS

- Precision drum control
- Low rolling resistance for delicate cables
- Fail-safe brakes



7.4 CABLE THIMBLES

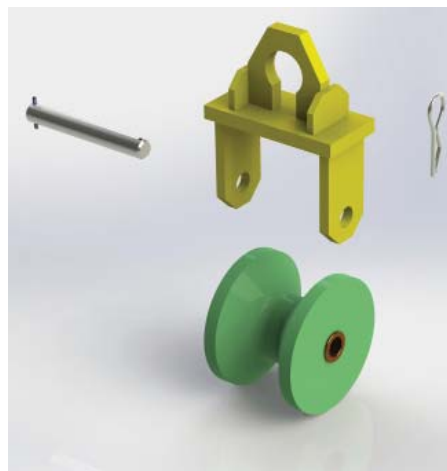


Thomson Cable Thimbles are designed to be suspended from the lifting hook of an excavator crane to guide the cable off the drum.

A soft polyurethane roller running on low friction bearings ensures that the cable is carefully handled.

To disconnect the thimble without cutting the cable the roller can be easily removed from the frame.

Single, twin and multiple roller versions are available to order.



FEATURES

- Strong and Light
- Designed to protect cable
- Soft urethane rollers
- 45kg Proof Load
- Full Factory Parts Backup
- CE Marked

A SIMPLE WAY TO REDUCE THE HARD WORK OF CABLE INSTALLATION

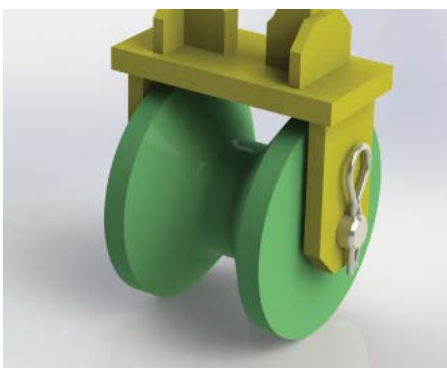
SPECIFICATIONS

Weight (Single)	11 kg
Weight (Twin)	14 kg
WLL (Safe Working Load /cable)	30 kg
Proof Load (Factory test)	45 kg

Signal Heads
Junction Indicators
Post platform rails

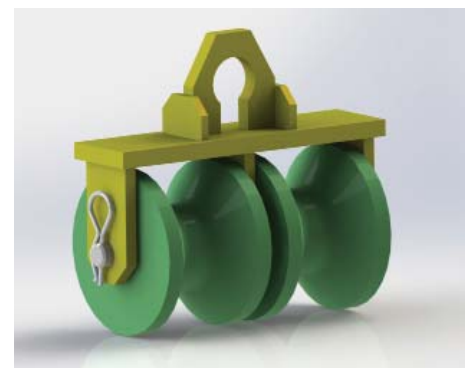
DOCUMENTATION

Operator's / Maintenance Manual
LOLER Test Certificate



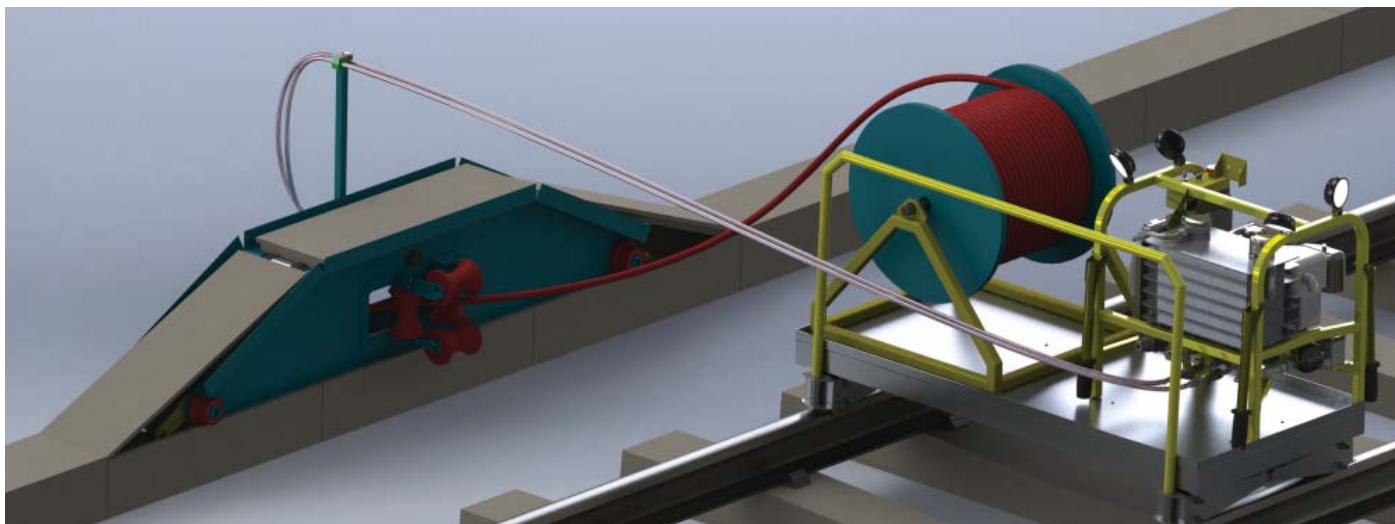
BENEFITS

- Fully certificated and tested.
- Simple to use.
- Light weight.
- Low rolling resistance.



Specifications given may be subject to change due to our policy of continuous improvement

7.5 CABLE INSTALLER



The Thomson Cable Installer is designed for the automated installation of cables into concrete troughing routes.

The machine lifts and relays the troughing lids, automatically feeding the cable into place, in one continuous action.

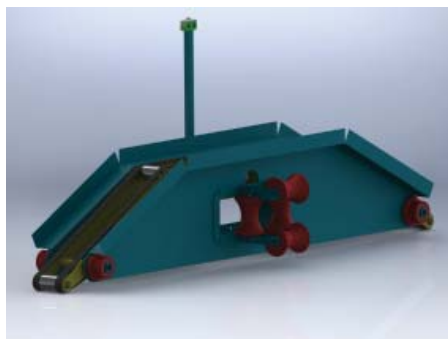
Hydraulically powered for smooth, powerful operation the cable installer drives itself along the top edges of the troughing.

Lids are handled carefully by the special mechanism to ensure that no damage is done.

A suction cleaner is available.

SPECIFICATIONS

Weight (machine only)	110 kg
Weight (power pack)	50 kg
Output	up to 30 troughs/min.
Trough Width	200mm - 600mm
Max Cable Size	50 mm



System Hyd.. Pressure	120 Bar
Body Colour	Customer Livery
Moving Parts	Signal Red

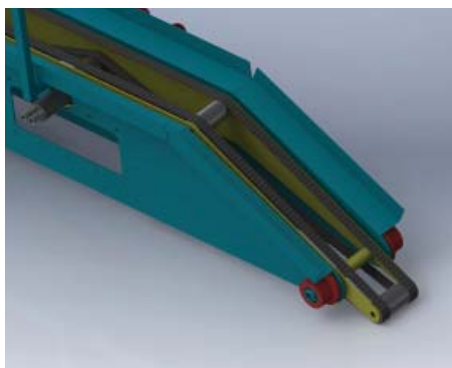
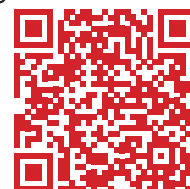
FEATURES

- Powered lid removal and re-fitting
- Semi-automatic operation
- Soft contact with trough and lids
- Infinitely variable speed
- Trough cleaning option available
- Full Factory Parts Backup
- CE Marked

A FAST AND EASY WAY TO INSTALL CABLES IN CONCRETE TROUGHING

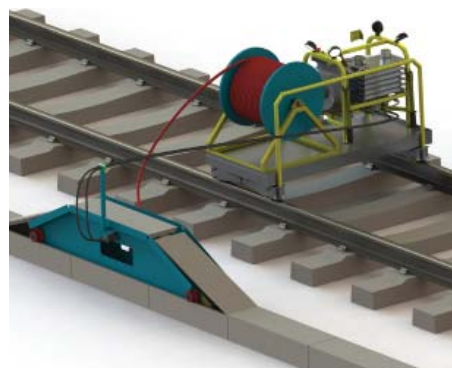
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Test Certificate



BENEFITS

- Reduced manpower
- Higher output
- Reduced fatigue
- Single pass operation



For News, Technical Documents, and Downloads including
Certificates and Specification Sheets head to:

www.thomsonrail.com

SECTION 8: TROLLEYS

Track trolleys from Thomson Engineering Design Ltd really deliver the goods!

Our range of trolleys includes four 'standard' models, the Bison, Buffalo, Elk and Hawk and we have also made many purpose designed 'special' models.

Innovative design, efficient use of materials, meticulous computer analysis and a wide range of test rigs enable us to produce the highest specification products on the market



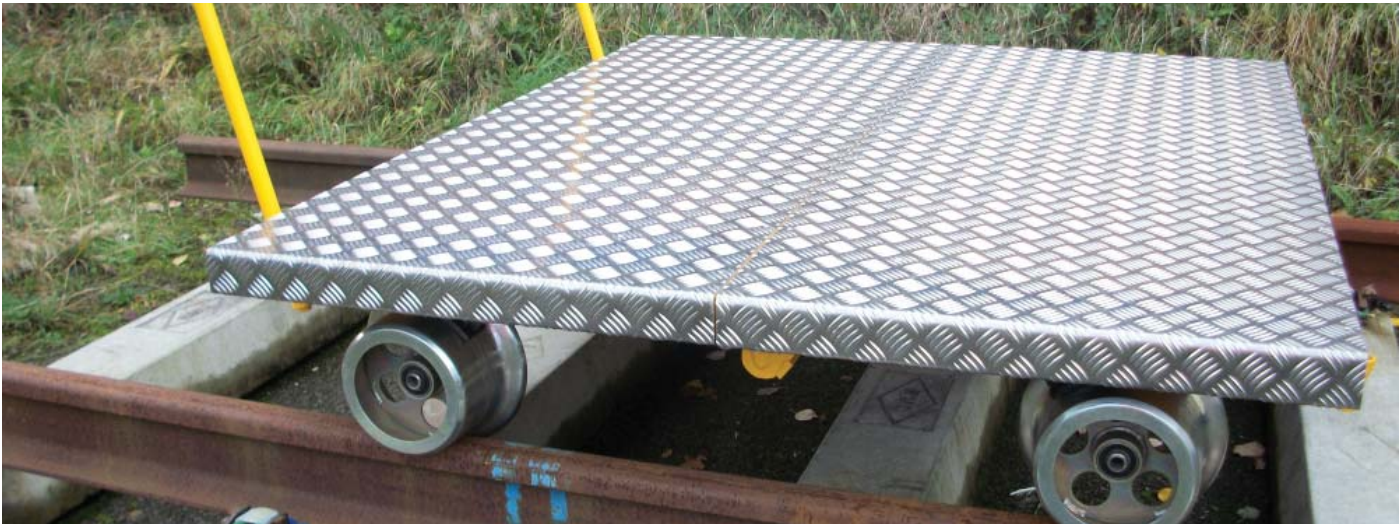
The Bison Track Trolley is lightest in its class, strongest in its class and has the best brakes in its class.

SECTION 8: VISUAL GUIDE

	DESCRIPTION	PAGE
	Buffalo Track Trolley A remarkably light weight yet heavy-duty trolley with a steel chassis and steel wheels yet weighing just 93kg.	A88
	Bison Track Trolley The lightest, strongest trolley in our range with a full 1,000kg payload.	A89
	Hawk Track Trolley A one-piece trolley with regenerative 4 wheel brakes.	A90
	Elk Trolley Skate Combining a heavy-duty rail skate with a barrow for simple transport of tools and materials on road and rail.	A91
	Raven Rail Mover The Raven Rail Mover is a light weight, modular, portable solution to moving rails.	A92
	Rail Marking / Greasing Trolley The Thomson Engineering Rail Marker quickly and easily applies a demarcation line on the rail head. It can also be used to apply spray grease for track lubrication.	A93



8.1 BUFFALO TRACK TROLLEY



Thomson Engineering Design's Buffalo Track Trolley incorporates a unique regenerative braking system where the weight of the trolley and load is used to apply the brakes.

The heavier the load, the harder the brakes are applied making this trolley inherently fail-safe.

Steel wheels with big ball bearings make the trolley easy to push and its high tensile box section chassis makes it strong and robust.

Easily carried, handled and assembled by two men the Buffalo Track Trolley is the first choice for maintenance crews.

SPECIFICATIONS

Weight	93 kg
Weight (one chassis section)	43 kg
WLL (Safe Working Load)	1,000 kg
Wheels	Spun steel
Wheel Profile	P1
Platform Height (above rail)	330 mm
Deck Width	1,750mm
Deck Length	1,500 mm



Chassis	Fabricated Steel
Deck	Aluminium / Plywood
Axles	Tubular steel
Steelwork Colour	08E51 Yellow



FEATURES

- Unique 4 wheel regenerative brakes
- Chassis modules weigh just 43kg
- Push only handle / brake design
- High tensile box section steel
- Steel wheels
- Sealed for life wheel bearings
- Aluminium deck (standard)
- Plywood deck (optional)
- Available in all track gauges
- 1,000kg payload capacity
- Full Factory Parts Backup
- CE Marked

A REMARKABLY LIGHT YET ROBUST TROLLEY FOR ALL PURPOSES

DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- Factory Inspection Certificate



BENEFITS

- Full 1,000kg payload capacity
- Very light to carry
- Quick and easy to assemble
- 4 wheel fail-safe brakes



8.2 BISON TRACK TROLLEY



Thomson Engineering Design's Bison Track Trolley incorporates a unique regenerative braking system where the weight of the trolley and load is used to apply the brakes.

The heavier the load, the harder the brakes are applied making this trolley inherently fail-safe.

Steel wheels with big ball bearings make the trolley easy to push and its high tensile alloy box section chassis gives it high strength.

Mounting sockets for sides, light poles and accessories are provided in each corner and, at 86kg total weight the Bison is fully 50kg lighter than its most popular rival.

SPECIFICATIONS

Weight	86 kg
Weight (one chassis section)	40 kg
WLL (Safe Working Load)	1,000 kg
Wheels	Spun steel
Wheel Profile	P1
Platform Height (above rail)	330 mm
Deck Width	1,750mm
Deck Length	1,500 mm



Chassis	Fabricated Aluminium alloy
Axles	Tubular steel
Steelwork Colour	08E51 Yellow



FEATURES

- Unique 4 wheel regenerative brakes
- Chassis modules weigh just 40kg
- Push only handle / brake design
- High tensile aluminium alloy chassis
- Steel wheels
- Sealed for life wheel bearings
- 1,000kg payload capacity
- Full Factory Parts Backup
- CE Marked

AN EXTREMELY LIGHT YET ROBUST TROLLEY FOR ALL PURPOSES

DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- Factory Inspection Certificate



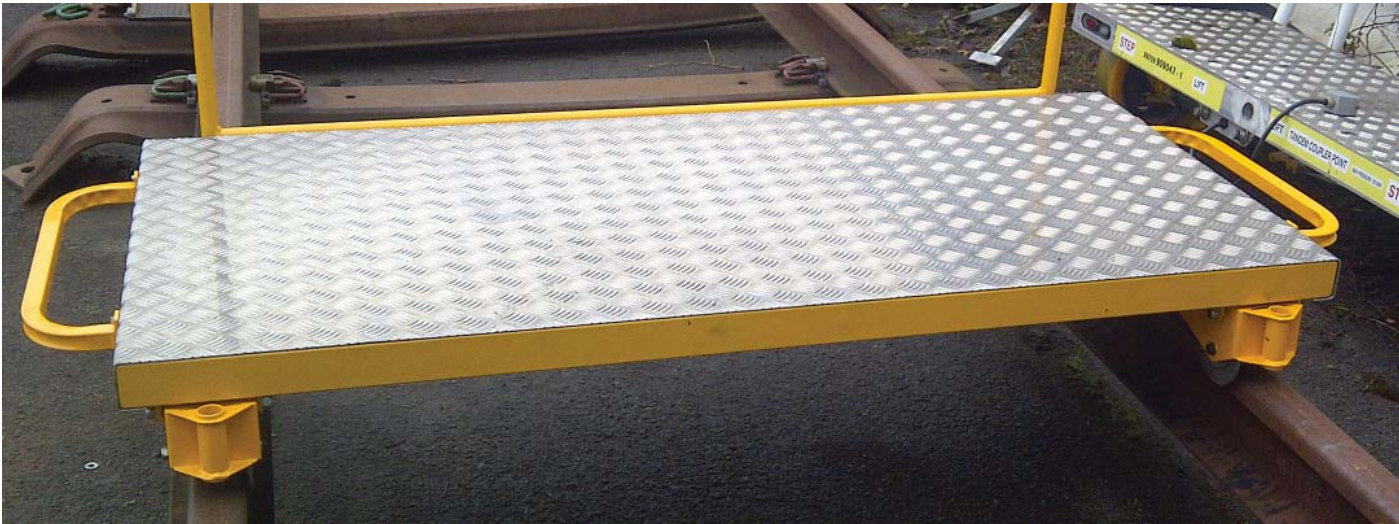
BENEFITS

- Full 1,000kg payload capacity
- Very light to carry
- Quick and easy to assemble
- Fail-safe brakes



Specifications given may be subject to change due to our policy of continuous improvement

8.3 HAWK TRACK TROLLEY



Thomson Engineering Design's Hawk Track Trolley incorporates a unique regenerative braking system where the weight of the trolley and load is used to apply the brakes.

The heavier the load, the harder the brakes are applied making this trolley inherently fail-safe.

Although similar in appearance to its competitors this trolley is stronger, lighter, neater and simpler than all the rest.

At 49kg for the main section and 8kg for the handle it is light and easy to carry too!



FEATURES

- Unique 4 wheel regenerative brakes
- Chassis module weighs just 49kg
- Push only handle / brake design
- High tensile box section steel chassis
- Steel wheels (aluminium option)
- Sealed for life wheel bearings
- 750kg payload capacity
- Full Factory Parts Backup
- CE Marked

AN EXTREMELY LIGHT YET ROBUST TROLLEY FOR ALL PURPOSES

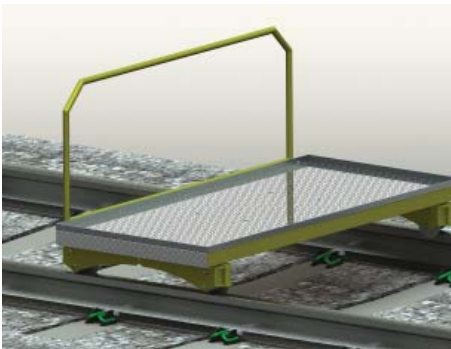
SPECIFICATIONS

Weight	57 kg
Weight (one chassis section)	49 kg
WLL (Safe Working Load)	750 kg
Wheels	machined steel
Wheel Profile	P1
Platform Height (above rail)	190 mm
Deck Width	1,700mm
Deck Length	800 mm

Chassis	Box section steel
Deck	Aluminium
Steelwork Colour	08E51 Yellow

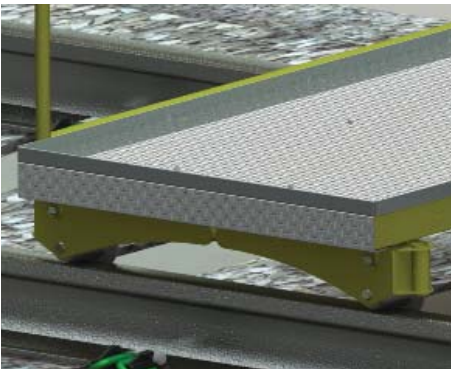
DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Factory Inspection Certificate

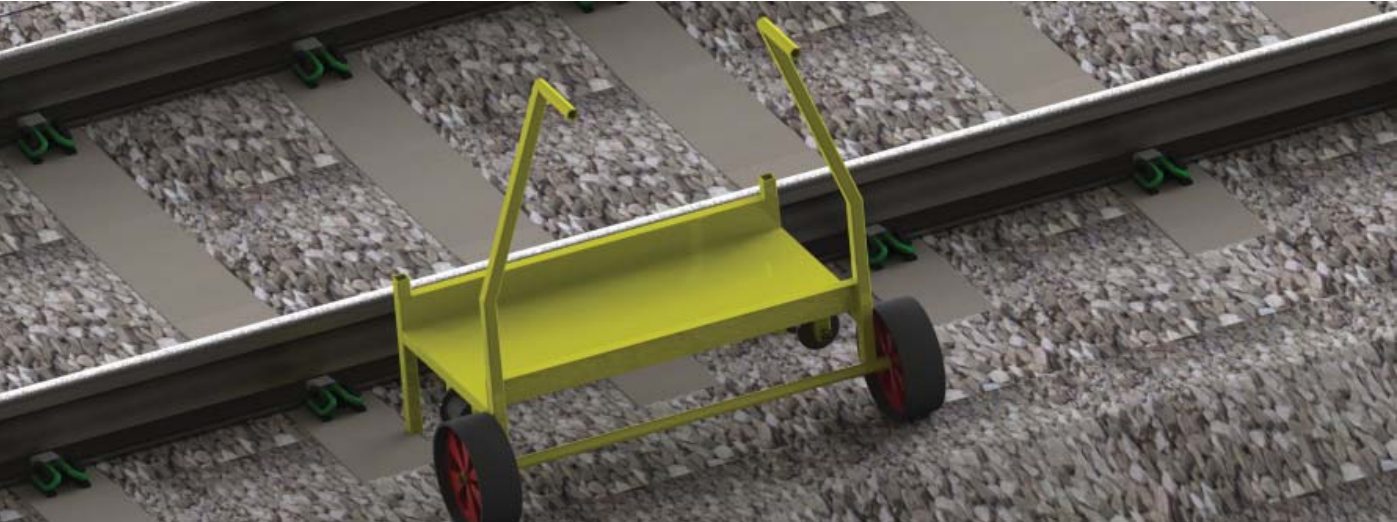


BENEFITS

- Full 750kg payload capacity
- Light to carry
- Push only design to prevent injury
- 4 Wheel Fail-safe brakes



8.4 ELK TROLLEY SKATE

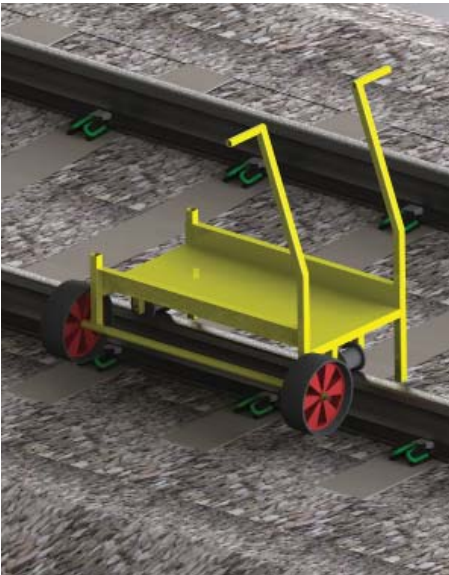


Carry your tools and equipment right from the van to the track and then along the line to the worksite on a single trolley- the Elk Trolley Skate.

On the rail the Elk Trolley Skate runs on hard nylon wheels with sealed ball races to make light work of propelling even the heaviest loads.

Off the rail the Elk Trolley Skate runs on either solid rubber or pneumatic tyres.

With removable handles this skate is easy to stow on a vehicle and the load tray is large enough to carry tools, bars, gas cylinders, etc.



SPECIFICATIONS

Weight	24 kg
WLL (Safe Working Load)	250 kg
Proof Load (Factory test)	500 kg
Mechanism	Hydraulically Operated

Wheels	Plastic centre/urethane tyre
Body Colour	08E51 Yellow
Wheels	Red

Deck Height (above rail)	225 mm
Tray Width	450mm
Tray Length	900 mm



Benefits

Dual Purpose Device - road and rail

Carry heavy tools and equipment right from the van to the job on one trolley

Light and compact for transport

Features

- Strong and Robust
- Unique Road / Rail design
- Removable Handles
- Strong steel construction
- 250kg capacity on rail
- Full Factory Parts Backup
- CE Marked

AN EXTREMELY USEFUL ADDITION TO ANY TRACK WORK GANG'S INVENTORY

Documentation

Operator's Manual

Parts Manual

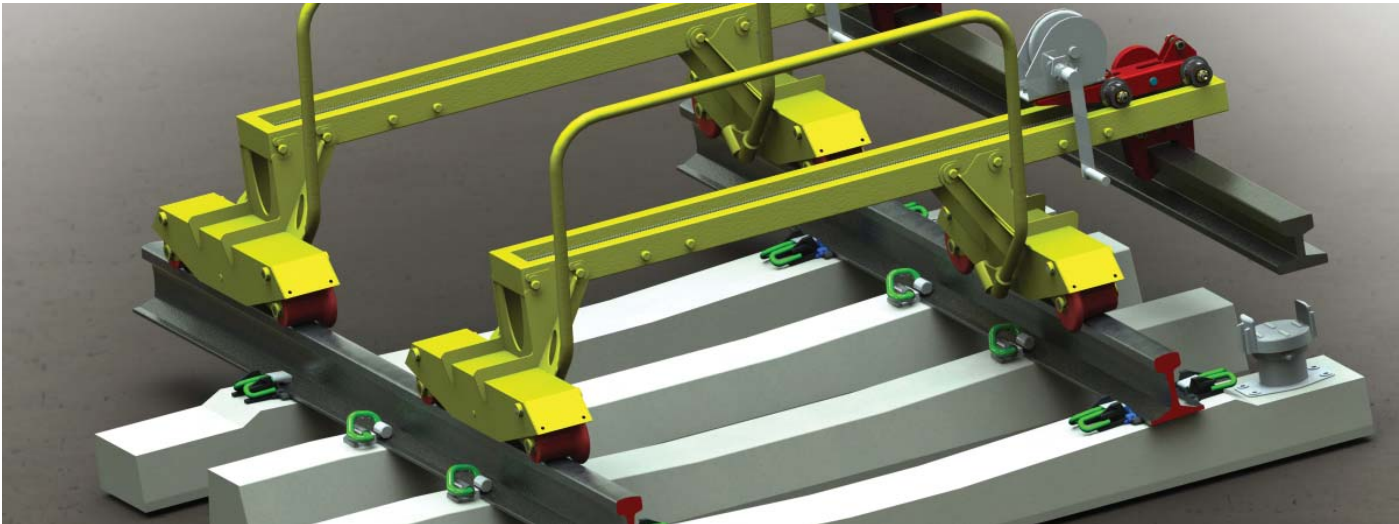
Maintenance Plan

Factory Inspection Certificate



Specifications given may be subject to change due to our policy of continuous improvement

8.5 RAVEN RAIL MOVER



The Thomson Raven is a new concept in manual rail handling.

Two versions are available: standard and wide top. Both can pick and carry rails in the four-foot but the wide top can also lift and carry conductor third rails.

The innovative lifting device design allows the frame to be considerably smaller and lighter than other designs and there is no need to fit a support bar to maintain gauge when travelling.

All parts are hand portable and the device is fitted with regenerative brakes released by the full width push handle.



SPECIFICATIONS(TYPICAL)

Weight (std / wide)	98 / 105 kg
WLL (Safe Working Load)	2,000 kg
Proof Load (Factory test)	4,000 kg
Mechanism	Manual
Frame Height (above rail)	445mm
Push Handle (above rail)	850 mm
O/A Width(std / wide)	1694 / 1975mm
O/A Length	840mm

Max. lift capacity	1,000 kg
Body Colour	08E51 Yellow
Lifting Gear	Signal Red



FEATURES

- Portable, modular design
- Two models
- Insulated or conductive wheels
- Heavy duty construction
- Clip together construction
- Load sensing regenerative brakes
- Full width push handle
- Wide top version can lift and transport DC third rail
- Full Factory Parts Backup
- CE Marked

A SIMPLE AND VERSATILE RAIL MOVER FOR ALL WORK.

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
LOLER Test Certificate



BENEFITS

- Lift and carry rails.
- Rapid loading and unloading of rails.
- Lift and carry conductor rails.
- Only 5 parts to carry.
- Weights include lifting gear.



8.6 RAIL MARKING / GREASING TROLLEY



The Thomson Rail Marker is a unique device designed for painting a mark or applying grease along the head of the rail.

Track Lube is often necessary on tight radius curves to prevent excessive wheel flange wear. This device accurately applies grease exactly where it is needed without waste or hardship on the operator.

The device can also apply a paint line to the head of the rail to demarcate work zones or areas where particular hazards exist.



FEATURES

- Strong and robust
- Lightweight construction
- Adjustable for all can sizes
- Long life Delrin wheels
- Ball race wheel bearings
- Side push handle with spray control
- Quick to assemble and dismantle
- For spraying paint or grease
- Full Factory Parts Backup
- CE Marked

A QUICK AND EASY WAY TO MARK OUT WORK AREAS OR TO APPLY TRACK LUBE.

SPECIFICATIONS(TYPICAL)

Weight (complete unladen)	12 kg
Weight (heaviest part)	9.5kg
Load Capacity	50 kg
Capacity (600ml Cans)	24 cans
Handle Height (above rail)	680 mm
O/A Width	1,000 mm
O/A Length	1,000 mm
O/A height (assembled)	800 mm

Body Colour	Peened Finish
Construction	Aluminium Alloy
Usage	Paint / Grease
Min can length	120 mm
Max can length	350 mm*

*note: longer cans can be accommodated using optional high capacity model.

DOCUMENTATION

Operator's Manual
Parts Manual
Maintenance Plan
Certificate of conformity



BENEFITS

- Quick, Simple and Accurate
- Reliable, durable marking
- Accurate grease placement
- Reduced manpower requirement
- Clear demarcation of track zones



Specifications given may be subject to change due to our policy of continuous improvement

SECTION 9: ACCESS PLATFORMS, RAMPS AND BARRIERS

Today's Road Rail Machines are more powerful, more capable and safer than ever before and combined with our wide range of attachments they are more versatile than ever before too.

But despite the great developments in RRV technology one difficulty remains - getting these machines on and off the track without danger or damage.

The Thomson Road Rail Access Platform (RRAP) known as TRAXESS offers a solution to this problem. Taking just a few minutes to install, the RRAP allows any machine - tracked or wheeled - up to 30 tonnes to be safely on or off-tracked and it does not prevent the passage of Engineering Trains through the worksite.



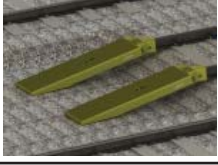
Where track has been removed our Track Access Ramps provide a safe means for machines to climb on and off the cut end of the track.

Finally our unique instant barrier system provides clear demarcation of safe walking routes, hazards and small worksites.



Traxess provides a safe on and off-tracking point without interfering with the passage of Engineering Trains

SECTION 9: VISUAL GUIDE

	DESCRIPTION	PAGE
	Instant Barrier System A unique instant barrier system for marking out exclusion zones and worksite limits.	A96
	Traxess A 5m long safe on and off-tracking platform for RRV's up to 30 tonnes which can be installed in under 20 minutes.	A97
	Track Access Ramps The safe and simple solution to getting Road Rail Vehicles on and off the end of a cut rail section	A98

9.1 INSTANT BARRIER SYSTEM



The Thomson Instant Barrier System is the simplest and quickest way to mark out the limits of a worksite or to warn of hazards in the rail environment.

The unique rail head clamp simply push fits onto the rail to securely attach the posts to BS113A, CEN60 and Bullhead rail. It is removed just as easily by simply lifting the post.

Single strap, twin strap and rigid rail designs are available as well as a range of accessories including lights and warning lamps.

Stillages containing 100m of barrier can be provided and two stillages fit neatly on a rail trolley.

SPECIFICATIONS

Span per post	0 to 3.6m
Weight (typical per post)	6 kg
Suitability	BS113A CEN 60 Bullhead Rail
Accessories	Red Flashing Light Flood Light Warning Signage Custom Printed Tapes



Steelwork	Bright Zinc Plated
Post	Aluminium Lining Plastic Outer Post

FEATURES

- One Piece Design
- Fitted in Seconds
- Fits most rail types
- Couple or single strap design
- Custom printed straps available
- Lamp post option
- Full Factory Parts Backup
- CE Marked

A PUSH-ON, PULL-OFF INSTANT BARRIER SYSTEM FOR MARKING SAFE WORKING AREAS AND HAZARDS

DOCUMENTATION

Operator's Manual
Certificate of Conformity



BENEFITS

- Wide variety of options and accessories
- Rapid installation and removal
- Compact design for easy transport





For safely on and off-tracking road rail vehicles without risk of damage to the rail there is no better solution than the Traxess system .

Installed in under twenty minutes the fabricated steel decking can take any vehicle or machine up to 30 tonnes.

Steel tracks or rubber ties make no difference with Traxess.

Each system comes in a custom made stillage for ease of transport. Loaded stillages can be stacked up to six high for transport or storage.



FEATURES

- Rapid deployment and removal
- Custom designed stackable stillage
- Suits all machines up to 30 tonnes
- Fully tested for durability
- Allows passage of Engineers Trains
- Simple, safe on and off tracking
- Minimal training required
- CE Marked

A TRULY HEAVY-DUTY SOLUTION TO ON AND OFF-TRACKING WHEELED AND TRACKED RRV'S

SPECIFICATIONS

Weight (centre panel)	2000 kg
Weight (side platforms)	970 kg
Weight (total inc. stillage)	4280 kg
Installation	3 lifts
Deck length	5 m
Height above rail	25 mm

Typical Installation Time	12 mins.
Main Colour	08E51 Yellow
Moving Parts	Signal Red

Hot dip galvanised option available

DOCUMENTATION

Installation and removal guide
Factory Test Certificate
Certificate of Conformity



BENEFITS

- Quick installation and removal
- Simple transportation
- Safe, easy on and off-tracking
- 12mm thick solid steel throughout



Specifications given may be subject to change due to our policy of continuous improvement

9.3 TRACK ACCESS RAMPS



Thompson Track Access Ramps are the solution to getting heavy machines in and out of the dug out track bed without damaging the rail.

The Track Access Ramps incorporate a sleeve which fits over the end of the rail to enclose and protect the rail.

Ramps can have either hardwood or steel treadplate top surface.

Axle loads up to 20 tonnes can be supported by the ramps and full instructions are supplied.

Each Ramp has a lifting point for ease of installation and removal.



FEATURES

- Heavy Duty Design
- Optional Surface
- Single Lifting Point
- Easy to Install and Remove
- Sleeper end panels available for even easier on and off-tracking
- Full Factory Parts Backup
- CE Marked

A SIMPLE WAY TO AVOID DAMAGE TO TYRES AND TO THE RAIL ENDS.

SPECIFICATIONS

Weight (per ramp)	250 kg
Application	BS113A and CEN60
WLL (Max Axle Load)	20,000 kg
Top	Hardwood or Treadplate
Mechanism	Loose Hinge

Finish	08E51 Yellow
Option	Hot dip glavanized

DOCUMENTATION

Operator's / Maintenance Manual
Quickstart Installation Guide



BENEFITS

- Protects both rail and machine
- Reduced tyre damage
- Purpose designed system



WHAT'S COMING NEXT?

Over the past thirteen years, Thomson Engineering Design has developed an average of six new products a year and this year we have done even better.

Since this catalogue was last published a year ago we have introduced the Rail Foot Thimble, improved the design of the Track Access Ramps, designed and developed the Traxess System, perfected the Autolok M rail clamp, created a new and innovative range of Trolleys, including the Raven Rail Mover and designed and developed the Instant Barrier System.

We have also spent some time improving our website: www.thomsonrail.com where our latest products are showcased and where you can also find technical documentation, films of products in action, certificates, news and download and print updates to this catalogue.

Last year's key product, the Cuttlefish Rail Turner and this year's Instant Barrier System have both been nominated for Network Rail Innovation Awards.

We remain committed exploring new ways of improving productivity and safety for rail maintenance operations.

Our ultimate goal is to eliminate heavy manual handling and working at height within the rail maintenance and renewals industry. We continue to make great strides towards this goal.

We are always keen to discuss areas where new ideas are required so, if you want to do your job better, faster, more easily and more safely please give us a call.



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