

2018

# Product Catalogue

## Section 1: Rail Handling





# Section 1: Rail Handling

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### **PRODUCTS FOR ROAD HAULAGE**

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This document is one of a series of 10 catalogue sections which together give specifications for all the products in our range.

Other sections are available on request.

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# 1.1 ARG08 AUTOLOK RAIL GRAB



The Autolok Rail Grab has been specifically designed for use with excavators and hydraulic cranes and is built to stand the high dynamic loads which these machines can produce.

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.

## 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



## 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

## DOCUMENTATION

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



## BENEFITS

Cam mechanism means no linkage to jam

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*

# OPTIONS AND ORDERING INFORMATION

The ARG08 Autolok Rail Grab is available in Manual and Hydraulic versions and can be specified for handling either running rail, conductor rail or grooved rail.

When ordering an Autolok for grooved rail please specify the particular rail to be lifted.

All versions have been prototype tested to 12 tonnes to ensure their safety in an arduous working environment.



Example: ARG08-01-01 manual Autolok grab for running rails.

## PRODUCT ACCEPTANCE

An application has been filed with Network Rail since 2008. We await a response.

# MODEL NUMBERS FOR ORDERING

When ordering an ARG08 Rail Grab please use the order code below to specify the various options.

**ARG08-□□-□□**

Grab Type	Code
Manual Operation	01
Hydraulic Operation	02

Rail Type	Code
Running Rail	01
Conductor Rail	02
Grooved Rail	03

# 1.2 RT211 CUTTLEFISH RAIL TURNER



The 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

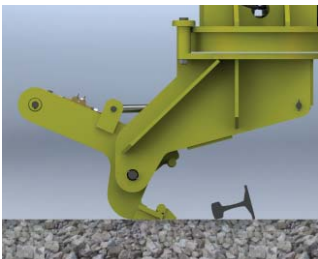
## SPECIFICATIONS

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	140 mm
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

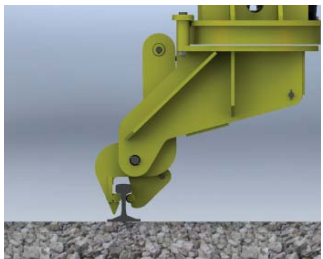
## DOCUMENTATION

- 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



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

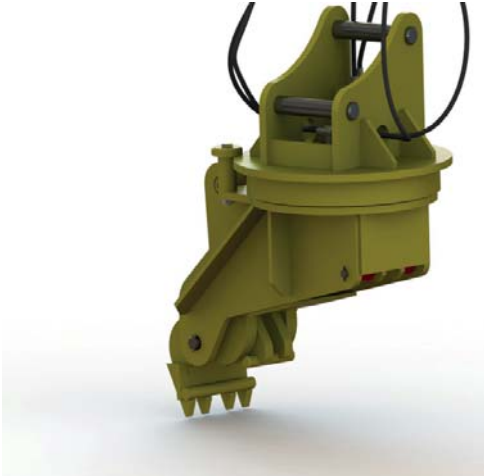
# OPTIONS AND ORDERING INFORMATION

The RT211 Cuttlefish Rail Turner is available with or without pressure control valves on the grab and tip hydraulic systems.

Pressure control should be specified where the host machine system pressure exceeds 210 Bar.

When ordering we will need to know the required dimensions for the adapter head. Adapter heads are available with fixed pins for quick couplers or with removable pins for direct coupling to the excavator boom.

A transport / storage stillage is available for this product.



**Example: RT211-01-01 Rail Turner with no pressure control valve or stillage**

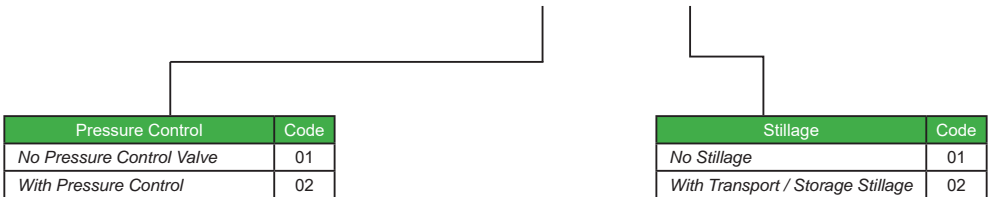
**PRODUCT ACCEPTANCE**

This product has full Network Rail Product Acceptance under Certificate number 05/05230

# MODEL NUMBERS FOR ORDERING

When ordering this product please use the ordering code below to specify the correct options

**RT211-□□-□□**



**NOTE**

When ordering we will need to know the dimensions of your host machine in order to manufacture the adapter head.

Please see Section 10 for details of the dimensions we require for a Type 04 head



# 1.3 TRLB20 TELESCOPIC RAIL LIFTING BEAM



**O**ur 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.

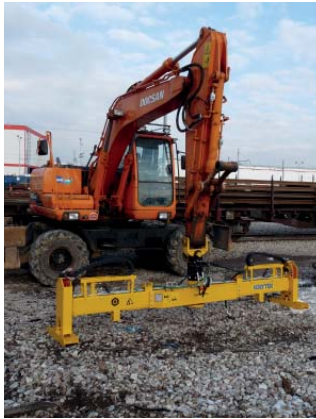
A variety of versions are now available for handling running rail, conductor rail and grooved rail.

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	08E81 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 jam

Fully enclosed mechanism means reduced damage

The only hydraulic beam currently accepted by Network Rail for the handling of new rail in 18m lengths





# OPTIONS AND ORDERING INFORMATION

The TRLB20 Telescopic Rail Lifting Beam is available with either manual or hydraulic telescopic extension.

The manual version is automatically clamped at the set length when the grab jaws are closed, a manual valve is used to release the clamps to allow the beam to be adjusted.

The hydraulic extension version incorporates an automatic changeover system which allows the operator to level the load once the beam has been lifted.



**Example: TRLB20-01-05 Telescopic Rail Lifting Beam with manual extension and Archimedes square drive adapter head.**

## PRODUCT ACCEPTANCE

This product has full Network Rail Product Acceptance under Certificate number 05/02965

# MODEL NUMBERS FOR ORDERING

When ordering this product please use the ordering code below to specify the correct options

**TRLB20-□□-□□**

Beam Type	Code
Manual Extension	01
Hydraulic Extension	02

Adapter Type	Code
Beam with flange only	00
Fixed head for swivel hook	01
Swivel head for fixed hook	02
Rotator + 1 pin head	03
Rotator + 2 pin head	04
Archimedes / QC adapter head	05
Rotator + truck crane adapter	06
Special Adapter	07

## NOTE

When ordering adapter heads we will need to know the dimensions of your host machine.

Please see Section 10 for details of the dimensions we require for each type of adapter head.

See Section 10 for adapter types and details

# 1.4 RT10 UNIVERSAL RAIL THIMBLE



The RT10 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 RT10 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 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	08E81 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*

# OPTIONS AND ORDERING INFORMATION

The RT10 Rail Thimble is designed for threading all types of running rail without adjustment.

The Thimble is available with or without a pressure control valve. Pressure control should be specified when the system pressure of the host machine exceeds 200 Bar.



Example: RT10-01-01 Thimble with no pressure control valve or stillage

## PRODUCT ACCEPTANCE

This product has full Network Rail Product Acceptance under Certificate number 05/03274

# MODEL NUMBERS FOR ORDERING

When ordering this product please use the ordering code below to specify the correct options

RT10-□□-□□

Thimble Type	Code
No Pressure Control Valve	01
With Pressure Control valve	02

Stillage	Code
No Stillage	01
With Transport / Storage Stillage	02

## NOTE

When ordering for use outside the UK we will need to know the types of rail to be used with this product

Please contact the factory to confirm compatibility

# 1.5 TD15 THREADER DRAGGER



The TD15 Threader Dragger is a unique solution to the handling of long welded rails.

Combining a Rail Foot Thimble with a hydraulic Drag Clamp the TD15 can drag and thread both running rails and conductor rails without having to change attachments.

The device can also be used to 'pick and place' rails and to lift and load short rail sections.

With a rated pull capacity of 10,000kgf and a lift capacity of 2,000kg the TD15 Threader Dragger is designed and built for a long working life.



### FEATURES

- 50 tonne grip force on dragger
- Hardened steel jaws
- For use with running and conductor rails
- Durable Case Hardened threading rollers
- Check valves on cylinders
- Hardened steel bushes on grab
- Instant change from dragging to threading and vice versa
- Lifting eyes to raise rail end when dragging

THE COMPLETE SOLUTION FOR THE HANDLING, REMOVAL AND INSTALLATION OF LONG WELDED RUNNING AND CONDUCTOR RAILS.

## SPECIFICATIONS

Weight	710 kg
WLL (Safe Working Load)	2,000 kg
Max. Pull force	10,000 kgf
Mechanism	Fully Hydraulic
O/A Height (shipping)	910 mm
O/A Width	1125 mm
O/A Length	1320 mm

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

Body Colour	08E51 Yellow
Moving Parts	Signal Red
Handles	White

## DOCUMENTATION

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



### BENEFITS

- Instant changeover between functions
- Reduced rail installation time
- Two-in-one versatility
- Long working life



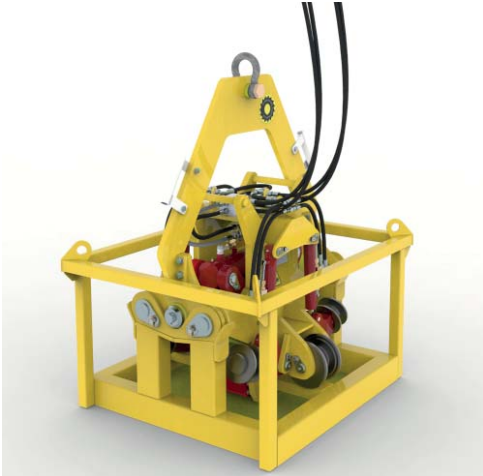
*Specifications given may be subject to change due to our policy of continuous improvement*

# OPTIONS AND ORDERING INFORMATION

The TD15 Threader Dragger is only available in one version and suits all machines of sufficient capacity.

As standard a pressure control valve is fitted to the drag clamp system. The threader system can also be fitted with pressure control if required.

A transport / storage stillage is available for this product.



**Example: TD15-01-02 Threader Dragger with standard hydraulic system and stillage**

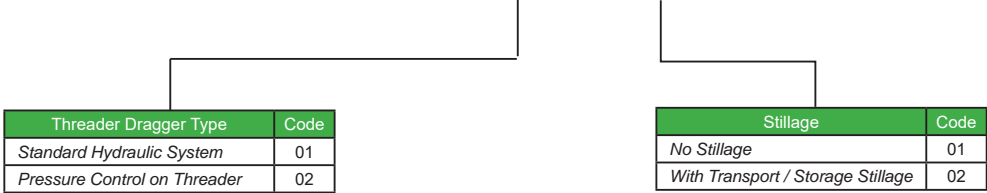
**PRODUCT ACCEPTANCE**

This product has full Network Rail Product Acceptance under Certificate number PA05/06670

# MODEL NUMBERS FOR ORDERING

When ordering this product please use the ordering code below to specify the correct options

TD15-□□-□□



**NOTE**

When ordering for use outside the UK we will need to know the types of rail to be used with this product

Please contact the factory to confirm compatibility

# 1.6 RFT15 RAIL FOOT THIMBLE



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
Handles	White

## DOCUMENTATION

- Operator's Manual
- Parts Manual
- Maintenance Plan
- LOLER Test Certificate
- PADS No.094/013617



## 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*



# OPTIONS AND ORDERING INFORMATION

The RFT15 Rail Foot Thimble is usually supplied for direct connection to a pressure controlled circuit on the host machine.

If required, however, a pressure reducing valve can be fitted to the Rail Foot Thimble to prevent over-pressurising of the hydraulic system.

This can be specified as type RFT15-02.

A transport / storage stillage can also be specified if required.



**Example: RFT15-02-01 Rail Foot Thimble with pressure control valve - no stillage**

## PRODUCT ACCEPTANCE

This product has full Network Rail Product Acceptance under Certificate number 05/05727

# MODEL NUMBERS FOR ORDERING

When ordering a RFT15 Rail Foot Thimble please use the order code below to specify the correct options

**RFT15-□□-□□**

Hydraulic System	Code
No Pressure Control	01
Pressure Reducing Valve	02

Stillage	Code
Thimble only - no stillage	01
With Transport / storage stillage	02

## NOTE

When ordering for use outside the UK we will need to know the types of rail to be used with this product

Please contact the factory to confirm compatibility



# 1.7 MRH14 MULTI-RAIL HANDLER



The Thomson Multi Rail Handler is designed for the lifting of packs of rails in bulk deliveries.

The twin hitch points - each fitted with a safety bow shackle - allow the device to handle part loads.

Manual (illustrated), pneumatic and hydraulic versions are available.

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

Multi Rail Handlers can also be supplied in any configuration from 1 to 10 rails and units can be strung together on spreader beams for larger loads.



### FEATURES

- Manual or Hydraulic Actuation
- Twin hitch points for odd and even numbers of rails
- Heavy duty construction
- Pneumatic, Hydraulic and Manual options
- 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	Hyd. / Pneu. / Manual
O/A Height (typical)	495mm
O/A Width	290mm
O/A Length	890mm

Max. Hyd. Pressure	190 Bar
Min. Hyd. Pressure	90 Bar
Body Colour	08E51 Yellow
Moving Parts	Signal Red
Operating Handle	White

## DOCUMENTATION

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



### BENEFITS

- Handle up to 8 rails per lifter
- Rapid loading and unloading of rails
- All versions can be used with spreader beams for handling long rail lengths



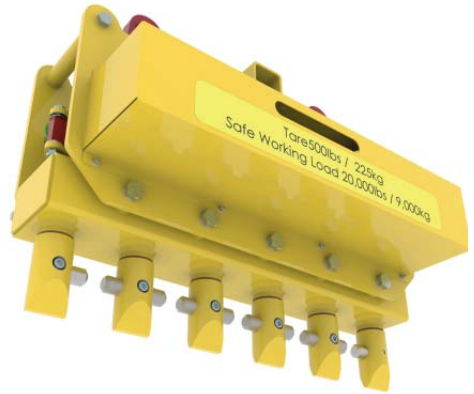
*Specifications given may be subject to change due to our policy of continuous improvement*

# OPTIONS AND ORDERING INFORMATION

The MRH14 Multi Rail Handler can be specified for handling 1 to 8 rails per lift.

The standard model is operated by a manual handle but hydraulic and pneumatic versions are also available.

Spreader beams can also be used to link two or more units side-by-side for special applications: please contact the factory for special installations.



**Example: MRH14-02-05 Multi Rail Lifter with pneumatic operation for lifting 5 rails**

## PRODUCT ACCEPTANCE

This product is intended for use in rail handling yards, dockyards, etc.  
No application has been made for Network Rail Product Acceptance

# MODEL NUMBERS FOR ORDERING

When ordering Multi Rail Handlers please use the order code below to specify the required options.

**MRH14-□□-□□**

Operation	Code
Manual Lever	01
Pneumatic	02
Hydraulic	03

Number of Rails	Code
1 rail	01
2 rails	02
3 rails	03
4 rails	04
5 rails	05
6 rails	06
7 rails	07
8 rails	08

## NOTE

When ordering we will need to know the rail type to be handled

# 1.8 RHB16 RAIL HANDLING BEAM



Designed for use with excavators and lorry mounted cranes the RHB16 Rail Handling Beam is specifically intended for use in rail delivery operations.

The unique design of the jaws allows rails to be stacked foot-to-foot to maximise load capacity on trucks and rail wagons.

A parachute valve prevents inadvertent dropping of the load but this can be overridden if used to load scrap rail into bins.

The heavy duty construction includes a six-tonne capacity rotator and an all-steel heavy section frame.

Check valves on the cylinders protect against leakage and burst hoses.



## SPECIFICATIONS(TYPICAL)

Weight	325 kg
WLL (Safe Working Load)	1,250 kg
Proof Load (Factory test)	2,500 kg
Rotator rating (where fitted)	6,000 kg
Mechanism	Hydraulic
O/A Height (typical)	1,430mm
O/A Width	500mm
O/A Length	1,275mm

Max. Hyd. Pressure (grab)	290 Bar
Min. Hyd. Pressure (grab)	90 Bar
Max. Hyd. Pressure (rotate)	160 Bar
Body Colour	08E51 Yellow
Hydraulic Cylinder	Signal Red
Jaws	Signal Red



### BENEFITS

- Pack rails tightly on trucks and wagons
- One man operation
- Use with either truck mounted crane or excavator

### FEATURES

- Full Hydraulic Actuation
- Unique Jaw Design
- Parachute Valve
- Heavy duty construction
- Stack Rails Foot-to-Foot
- All joints fitted with grease nipples.
- Full Factory Parts Backup
- CE Marked

A HEAVY DUTY GRAB DESIGNED SPECIFICALLY FOR RAIL DELIVERY OPERATIONS.

### DOCUMENTATION

Operator's Manual  
Parts Manual  
Maintenance Plan  
LOLER Test Certificate




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

# OPTIONS AND ORDERING INFORMATION

The RHB16 Rail Handling Beam is available in two versions: with or without the parachute safety valve.

The basic beam has a 6 bolt standard rotator flange mounting but can be factory-supplied with a wide variety of adapter head options including hydraulic rotators (see Section 10 for full details).

This beam can also be fitted with an adapter head for our quick change truck crane adapter system.

Standard colours are as shown but alternative paint schemes are available - please contact the sales team for details.



**Example: RHB16-02-06-01 beam with parachute valve, rotator and truck crane adapter head, no stillage**

## PRODUCT ACCEPTANCE

This product is primarily specified for road haulage of rail sections and for loading and unloading rails in handling yards

As such no application has yet been made for Product Acceptance however Thomson Engineering will be pleased to make an application if required

# MODEL NUMBERS FOR ORDERING

When ordering a RHB16 Rail Handling Beam please use the order code below to specify the correct options.

**RHB16-□□-□□-□□**

Beam Type	Code
No Parachute Valve	01
With Parachute Valve	02

Stillage	Code
No stillage	01
With Transport / Storage Stillage	02

Adapter Type	Code
Beam with flange only	00
Fixed head for swivel hook	01
Swivel head for fixed hook	02
Rotator + 1 pin head	03
Rotator + 2 pin head	04
Archimedes / QC adapter head	05
Rotator + truck crane adapter	06
Special Adapter	07

## NOTE

When ordering adapter heads we will need to know the dimensions of your host machine.

Please see Section 10 for details of the dimensions we require for each type of adapter head.

See Section 10 for adapter types and details

Please enquire for further details to:

## **Thomson Engineering Design Ltd**

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**Email: [sales@thomsondesignuk.com](mailto:sales@thomsondesignuk.com)**

**Web: [www.thomsondesignuk.com](http://www.thomsondesignuk.com)**

**For technical enquiries please contact: [technical@thomsondesignuk.com](mailto:technical@thomsondesignuk.com)**



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