

HDRB18-01 RAIL BEAM Specifications



A hydraulic lifting beam for handling rail in heavy-duty applications

Issue 1

October 2018

Introduction

The HDRB18-01 Rail Beam has been designed as an attachment for materials handlers, excavators and hydraulic cranes..

An automatic mechanism built into the device diverts the hydraulic flow from the jaws when the beam is lifted to power a load levelling system allowing the beam to 'side shift' the load by up to 750mm (29.5in) to balance it for a level lift.

At the push of a lever on the beam the overall length of the beam can be extended or reduced by a full 3m (9ft 10in).

Powerful hydraulic jaws grip the rails securely and the jaw cylinders are fitted with check valves to guard against leakage or hose failure.

A hydraulic rotator rated at 16 tonnes maximum capacity with a torque of 3,400Nm (2,500lbft) ensures that the operator has complete control of the beam and its load.

The unique design of the jaws allows the stacking of rails 'foot-to-foot'.



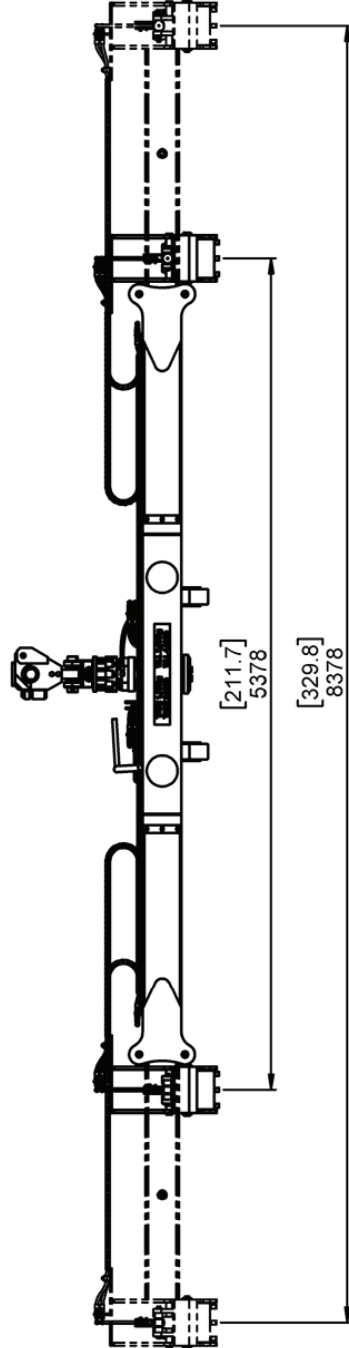
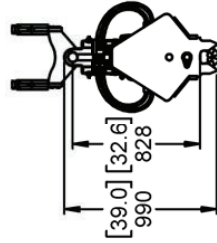
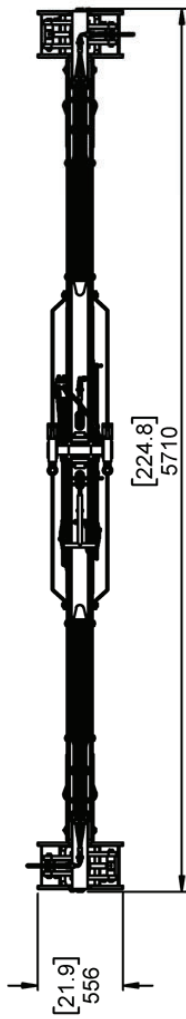
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First Issue	21st October 2018



Specifications

Overall Dimensions (L x W x H) (telescope closed)	5,710 x 556 x 990	mm
	224.8 x 21.9 x 39.0	in
Tare Weight (without adapter head)	1,350	kg
	2,970	lb
Working Load Limit	2,050	kg
	4,500	lb
Connection to Host Machine	Adapter head to order	
Rotator	Baltrotor GR16	
Max. Hydraulic Pressure (Grab Circuit)	290	Bar
	4,000	Psi
Max. Hydraulic Pressure (Rotate Circuit)	250	Bar
	3,625	Psi
Max. Flow (both Circuits)	40	l/min
	10.6	USg/min
Rotator Torque (at 250Bar - 3,625Psi)	3,400	Nm
	2,500	lbft
Max. Lift Acceleration at Full Load	2	g
Grab System Pressure (Factory Set)	150	Bar
	2,200	Psi
Grab Grip Force (per Jaw)	40.7	kN
	9,130	lb
Min. Jaw Centre Distance	5,378	mm
	211.7	in
Max. Jaw Centres Distance	8378	mm
	329.8	in
Min. Rail Length	5,700	mm
	224	in
Finish	Wet Sprayed / Electroplated zinc	
Colours	Yellow (beam parts)	
	Signal Red (cylinders and jaws)	

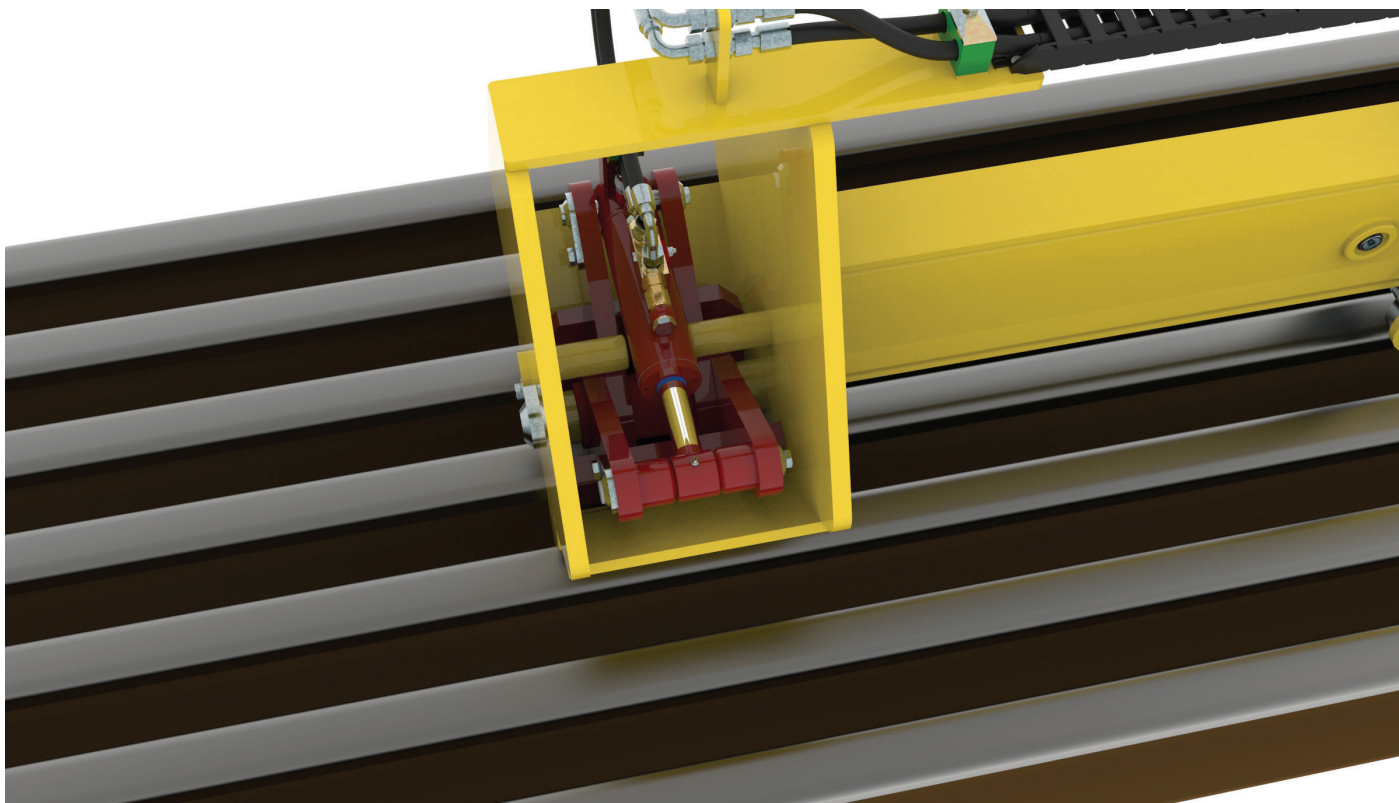


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PROJECT HDRB18-01 RAIL BEAM		FINISH: AS PARTS		DEBRIS AND SWAMP EDGES		DO NOT SCALE DRAWING		REVISION 01	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ±0.3 / ±0.5mm ANGULAR: ±0.5deg		COLOUR: AS PARTS				This document contains the intellectual property of THOMSON ENGINEERING DESIGN LTD. Reproduction in part or as a whole is prohibited.			
Stock Size	NAME	ORGANISATION	DATE	TITLE: GENERAL ARRANGEMENT					
Stock Length	DRAWN: D. THOMPSON	THOMSON ED. LD.	19/10/18						
Vendor	SKETCHED								
Vendor No.	APP'D								
Where Used	G.A.								
Configuration	JAWS CLOSED SHORT								
QTY REQD	1								
Client	THOMSON ENGINEERING DESIGN LTD			WEIGHT: 199.48		SCALE: 1:30		SHEET 2 OF 2	

Key Features



Heavy-duty jaws gripping the rail. The jaws are designed to fit between the heads of tightly bundled rails.

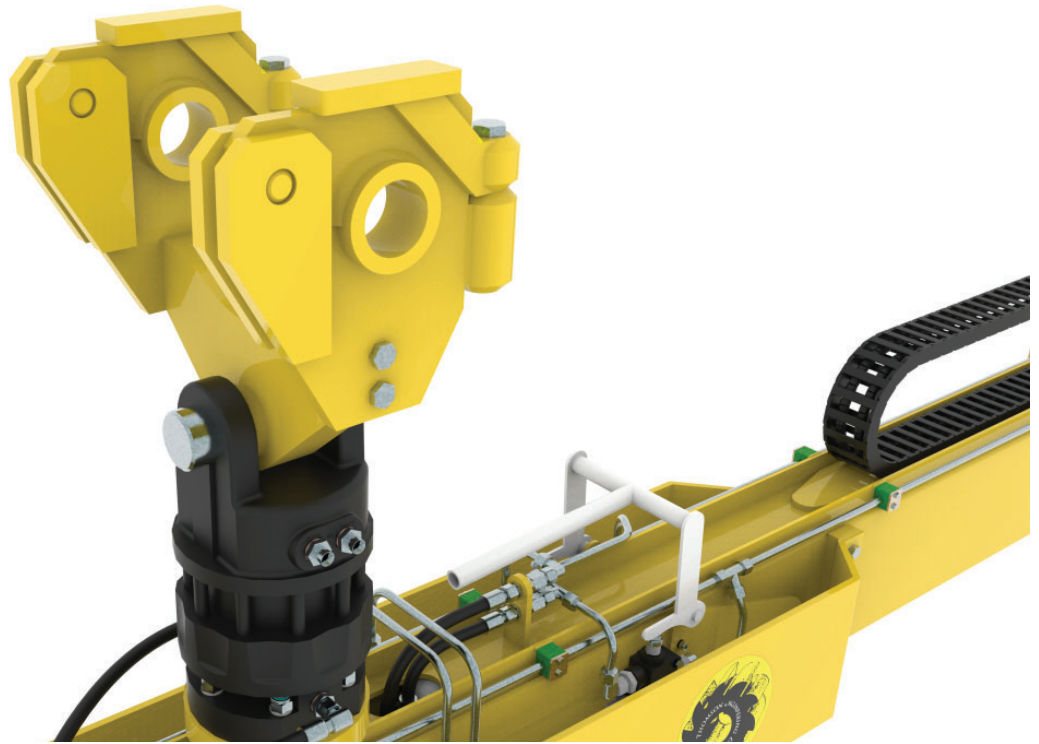
Jaws designed for tightly packed rails, check valves on the jaw cylinders, a hydraulic telescope function with load-levelling and a heavy duty hydraulic rotator add up to a full featured rail handling beam suitable for long-term operation in a challenging environment.

The hydraulic telescopic system was developed for our popular TRLB20-16 hydraulic rail beam but has been improved and updated in this new design.

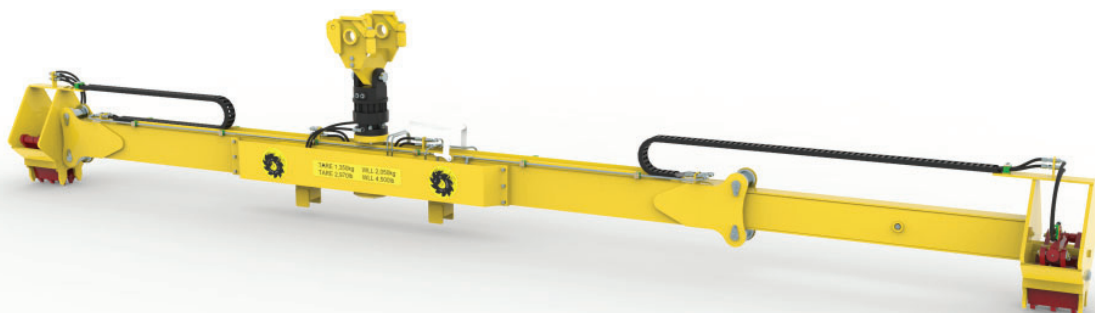
All our beams can be factory fitted with an adapter head custom built to suit your machine and tested and certificated as a complete attachment. This means that it arrives ready to go straight into service.

All our products are CE marked ensuring that they meet the latest safety and fitness for purpose requirements.

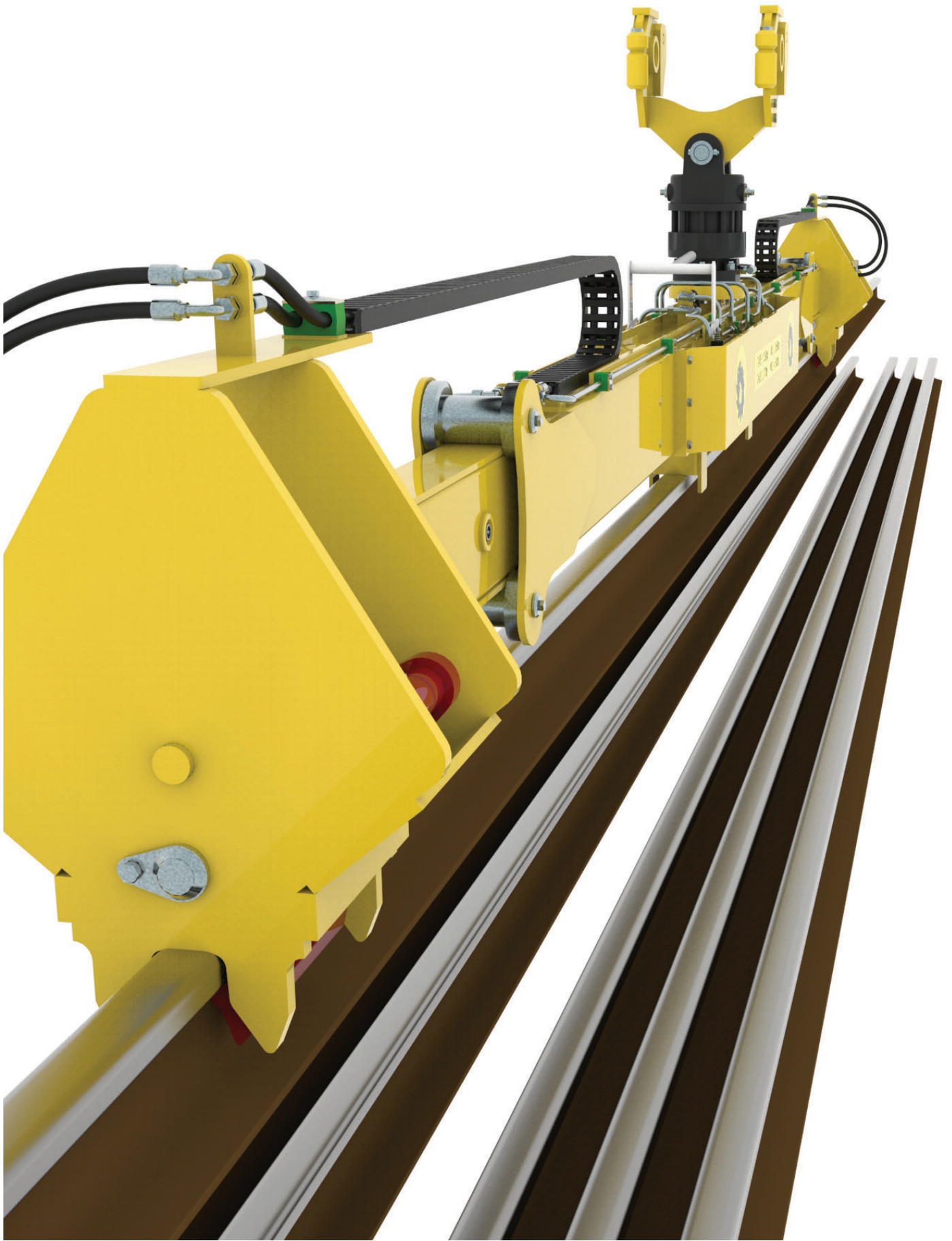




A custom built adapter head may be supplied to suit any host machine. The clamshell type head shown is suitable for Fuchs machines and is mounted on the hydraulic rotator. The white handle near the rotator is used to extend and retract the telescopic ends of the beam.



Unless the white handle is depressed the hydraulic supply to the jaws is diverted to the telescopic load-levelling function when the beam is lifted. In this way the beam can 'side shift' to aid the handling of long rail sections.



Contact Details

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***P**LEASE NOTE*

Whilst every care is taken to ensure that the contents of this document are true and accurate, the specifications of our products and the scope of our services are constantly changing as part of our policy of continuous improvement.

We strongly recommend contacting the factory to ensure that details given are still current.

More than half our business comes from special products designed and built as one-off's and we are always pleased to discuss amended specifications should the product detailed here not meet your exact requirements.

