



CHRISTIE
TOTAL TORQUE SOLUTIONS

Bespoke
Engineered
Rail
Solutions



W. Christie (Industrial) Ltd
Contact us for our full range of
Bespoke Engineered Rail Solutions

W. Christie (Industrial) can design and manufacture Bespoke Engineered Solutions for a wide range of rail applications.

Please request our Bespoke Engineered Solutions Brochure and visit our website for further examples of our capabilities.



CHRISTIE

Bespoke Engineered Solutions
A Division of W. Christie (Industrial) Ltd

BC-RAD BL - Rail Torque Tool *Powerful and Reliable*

Proven gearbox design and the latest battery technology



Brushless Technology

Brushless Motor

Adjustable Handle

18V 5.2Ah Li-ion Battery

Extended Shaft for ergonomic positioning

Bespoke Reaction

Features:

- Heavy duty battery operation
- Repeatability of +/- 5%
- Torque set (10 Nm increments) & lock
- Ergonomically designed for rail applications
- New brushless motor technology
- Low Noise
- Non-impacting – no vibration
- Lightweight
- No exhaust fumes



BC-RAD BL - 90° Model

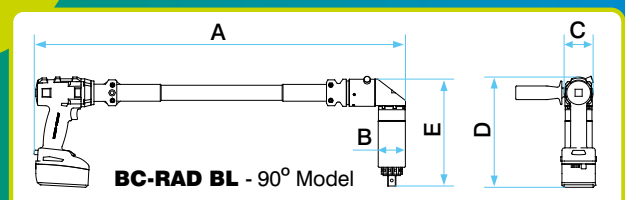
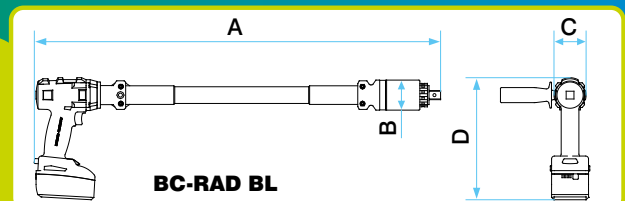
For alternative access options



- Shown with two variations of bespoke reactions
- Bespoke reactions designed to your requirements (at extra cost)



See table for dimensions and detail



Model	Torque (Nm)		Speed RPM	Weight Kg	Dimensions (mm)					Square Drive
	Min.	Max.			A	B	C	D	E	
7 BL			21	~ 6.0	852					
7 BL - 90°	170	700	13	~ 7.3	862				N/A	
14 BL			10	~ 6.2	852				N/A	
14 BL - 90°	300	1,400	6	~ 7.5	862	63	67	256	199	3/4"
14A BL*			63	~ 7.2	901				N/A	
14A BL - 90°*	300	1,400	38	~ 8.5	862				248	

*Auto 2 Speed

Counterbalance Lift Beams

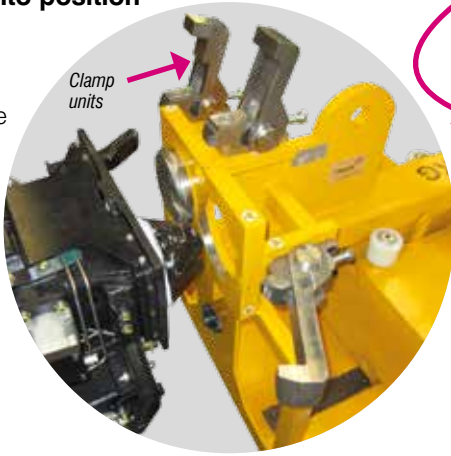
Safe removal and refitting of train couplers for maintenance

Automatic Coupler

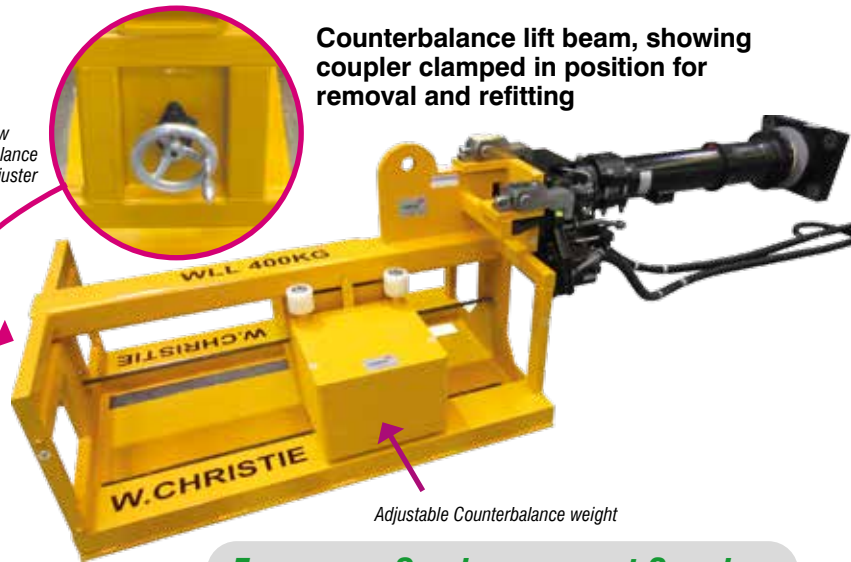
Counterbalance lift beam and coupler aligned ready for clamping into position

Features:

- Adjustable counterbalance weight
- Precision engineered clamping units
- 400 Kg WLL capability
- Fork truck lifting channels



Lead screw counterbalance weight adjuster



Counterbalance lift beam, showing coupler clamped in position for removal and refitting

Double Ended Counter-balance 3 Coupler System

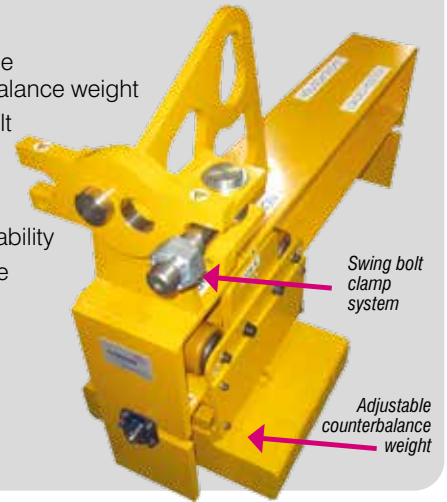
- Suitable for both Auto-couplers and Intermediate Bar Couplers



For use on Semi-permanent Couplers

Features:

- Adjustable counterbalance weight
- Swing bolt clamping system
- 200 Kg WLL capability
- Lifting eye



Counterbalance Cradle

- Working load limit of 660 Kg
- Specifically designed for Coupler Counterbalance Lift Beams
- Allows easy fork lift manoeuvring, relocating and storage of the Counterbalance Lift Beams



Coupler Bolting Equipment

Coupler Support Beam Compression Clamps

Features:

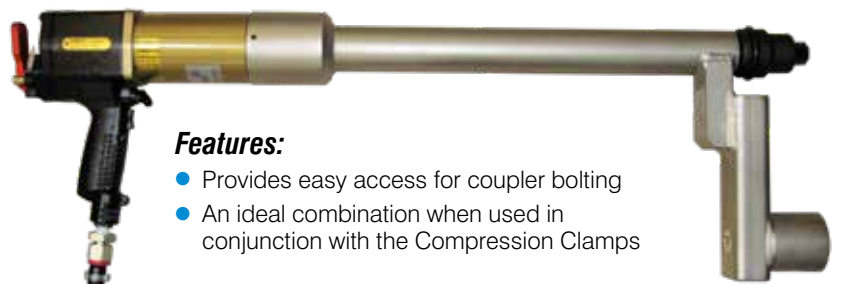
- Safely acts as a spring compressor to allow easy insertion of train coupler



C-RAD 34 Pneumatic Torque Tool with Nose Extension

Features:

- Provides easy access for coupler bolting
- An ideal combination when used in conjunction with the Compression Clamps



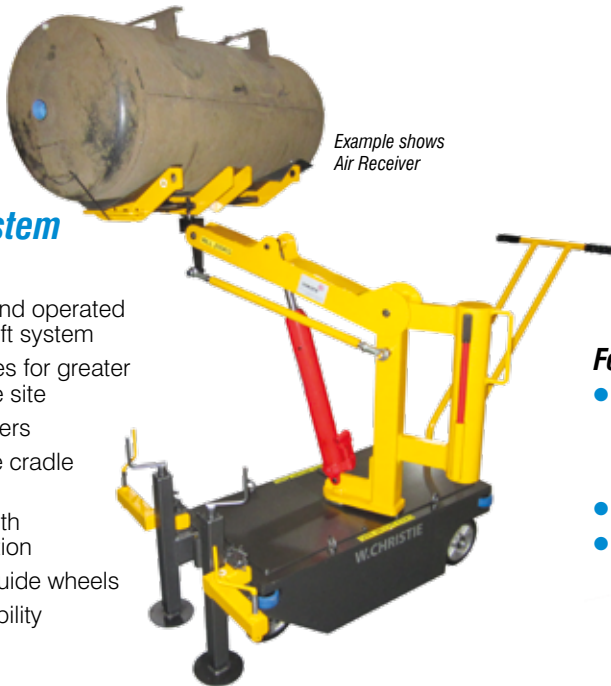
Multi-positional Manipulators

Easy removal and installation of components from the underside of trains

Hand operated hydraulic vertical lift system

Features:

- Self-contained, hand operated hydraulic vertical lift system
- Removable handles for greater access around the site
- Adjustable stabilisers
- Length extendable cradle with 360° rotation
- 270° rotating jib with 0.77 metres elevation
- Maintenance pit guide wheels
- 200 Kg WLL capability



Battery powered hydraulic vertical lift system

Features:

- Self-contained, rechargeable battery powered hydraulic vertical lift system
- Hand pendant controller
- Adjustable stabilisers
- Interchangeable 360° rotating cradle
- 180° rotating jib with 1.53 metres elevation
- Maintenance pit guide wheels
- 300 Kg WLL capability

Compact Manipulator

Features:

- Working load limit of 200 Kg
- Manually operated hydraulic jib arm
- Different sized, interchangeable cradles (360° rotating) which can be designed to customer requirements
- 90° rotating jib arm with indexed positions
- Lifting range of 1.3 metres from a min. height of 0.5 metres
- Removable manoeuvring handle



All items can be designed and manufactured in different sizes or configurations to suit your specific application.

PLEASE CONTACT US TO DISCUSS TO YOUR REQUIREMENTS...call +44(0)1709 550088

Jacking System with Support Stands

Provides a robust platform each side of a train to support hydraulic lifting equipment for elevating a train carriage.

Features:

- Ensures secure contact with rail line
- Includes internal storage boxes for hydraulic jacks
- Integral forklift truck guides
- Working load limit of 20,000 Kg in jacking mode



Scissor Lifts (Elevator Systems)

Robust systems for movement of heavy modular components



Features:

- Electrically driven (battery)
- Model shown is capable of lifting 1,000 Kg to a max. height of 1.6M (Models available for lifting up to 3,000 Kg)

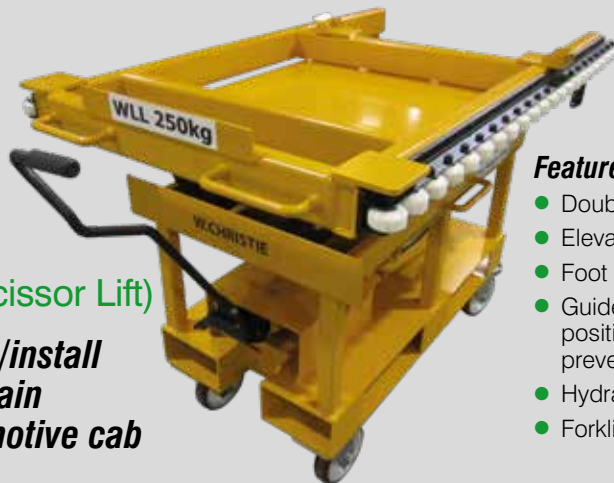


- 600 Kg WLL
- Double scissor mechanism

- Manual operation
- Complete with adjustable table levelling pads

HVAC Unit Support Trolley (Scissor Lift)

Designed to remove/install HVAC units inside train carriages and locomotive cab



Features:

- Double scissor mechanism
- Elevation via pump handle
- Foot pedal lowering release
- Guide rollers for correct positioning of trolley and to prevent damage to inside of train
- Hydraulic cylinder safety bar
- Forklift truck access points

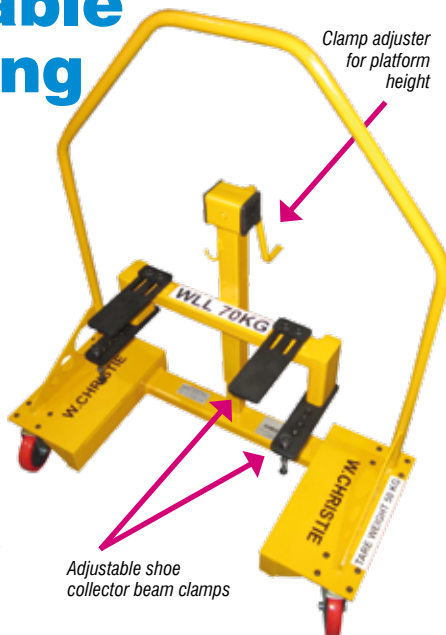


Adjustable Clamping Trolley

Safe and secure support of a shoe collector beam during removal and maintenance

Features:

- 70 Kg WLL capability
- Adjustable clamping system



Gas Bottle Transport

For safe movement of high pressure gas cylinders

Features:

- Forklift channels
- Parking brakes
- Height adjustable bottle platform (up to 260mm from ground level) via elevation handle
- Lockable bottle retainers to ensure secure transportation

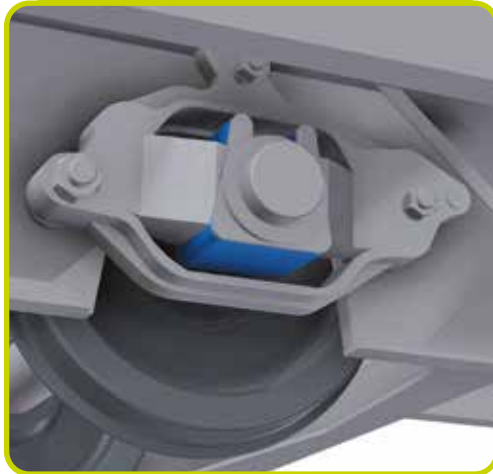


UNDERGROUND TRAIN Bogie Frame

Tightening/untightening of bolts on an underground train bogie frame to allow height adjustment

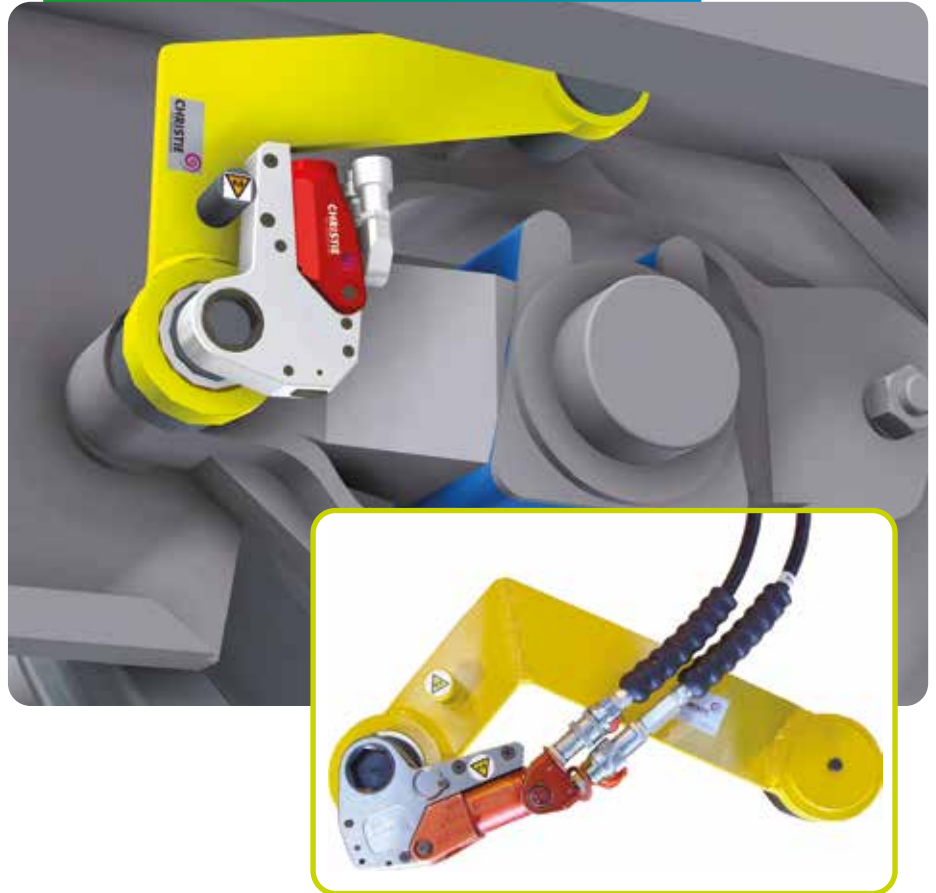
Problem:

Accessing the bolts on the bogie frame, with beam and sole bar obstructions, whilst avoiding damage to the Aluminium section.



Solution:

Direct fit hydraulic torque tool used with a cranked reaction platform which reacts on an opposing nut to the torque tool



Train Auto-coupler

Tightening & Untightening bolts on auto-coupler mounting plate on trains

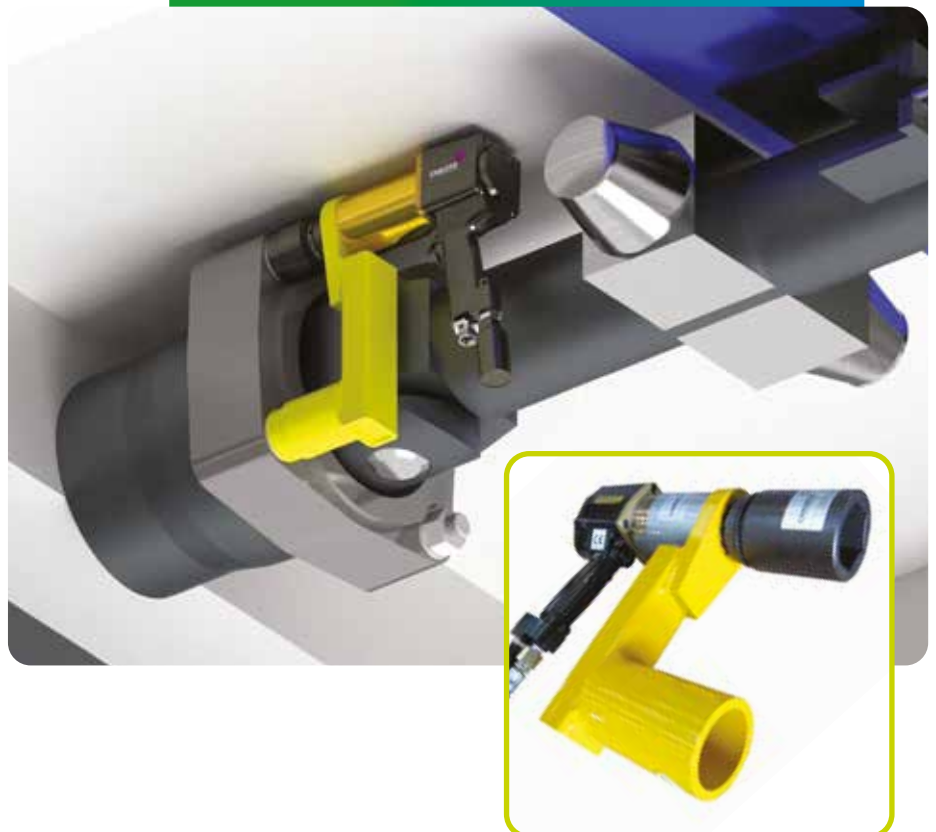
Problem:

Accessing difficult to reach bolts on auto-coupler mounting plate and the need to prevent damage to areas of the auto-coupler during bolting process. Traceability of torque data is also increasingly required.



Solution:

C-RAD 34 (3,400 Nm) Pneumatic or EC-RAD 3400 (3,400 Nm) Electronic Torque Tool with straight reaction tube. The electronic tool option can provide data logging facility.



UNDERGROUND TRAIN Bogie Hydraulic Lifting System



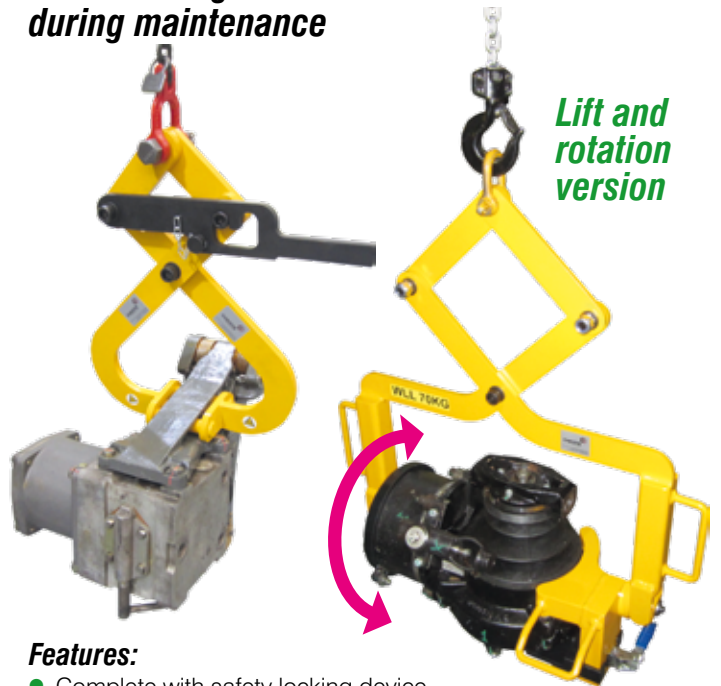
Stable system for carrying out general bogie maintenance and wheel reprofiling

Features:

- 20,000 Kg lifting capability
- Adjustable for different working heights

Brake Actuator Lifting Clamps

Secure lifting of brake actuators during maintenance



Features:

- Complete with safety locking device
- Provides balanced lifting

Portable Battery Maintenance Cart

Provides a stable system for removal of batteries from trains



Features:

- Non-return flaps restrict movement of battery
- Hand operated lifting pump
- Integral rollers for ease of battery movement
- 200 mm variable height
- 1,000 Kg capacity

Ball Pallets

Pallet system for manoeuvring components



Features:

- Allows components to be easily manoeuvred into position for bolting on the underside of trains from forklift
- Working load limit of 275 Kg (larger versions also available)

Tool Storage Solutions

A selection of trolleys & cases manufactured & supplied by W. Christie, most of which are custom built to customer's specific requirements.

From wheeled versions with lockable compartments to those with lifting lugs & grab handles, the options are endless!

- Wheeled Trolleys with brakes
- Removable Wheels
- Grab Handles
- Multiple divided sections for individual tools
- Gas spring lid systems
- Raised base for using with fork lift trucks
- Mobile benches
- Retractable wheel mechanisms
- Storage cupboards
- Fully lockable units

We also supply trolleys and cases for any use... not just tool storage!



Wheeled with Brakes



Tool Sections



Large 0.9 m³ Storage Capacity

Quality Catches and Hinges



Detachable Trolley



Removeable Handle



Tool Sections



Retractable Wheel Mechanism



Gas Springs

For more Tool Storage Information visit www.wchristie.com or call **01709 550088**



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Train Bogie Stands

Straddles the maintenance pit to give safe, secure and easy access at the correct working height

Features:

- Allows safe and easy access for working on Bogie Sets over maintenance pits.
- Designed to be used in conjunction with Pit Boards



Pit Boards

Provides safe access over maintenance pits



Features:

- Locks securely into the rail line
- Can be rated up to 5,000 Kg
- Different sizes available to order
- Optional removable handrail
- Portable for use around the site

Hot Air Dryer

Helps to dry the air in larger internal work areas

Features:

- 2 heat settings
- 18 Kw heater unit (different sizes of heater available)
- Height adjustable
- Highly manoeuvrable



Train Cable Tray Support Frame

A secure system for straddling the rail lines



Features:

- Manually operated double scissor lift system
- Designed to rest securely on the rails below the train
- Scissor lift and support frame are separable for ease of transportation
- 100 Kg lifting weight capability

All items can be designed and manufactured in different sizes or configurations to suit your specific application.

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Towable and electrically (battery) driven Transporter

Robust transporters for heavy equipment

Features:

- Working load limit of 2,000 Kg
- Remote control operation
- Operating warning lights and alarm



• With Optional Wheel Guards



• Retractable Rail Wheel Version for use over inspection pit



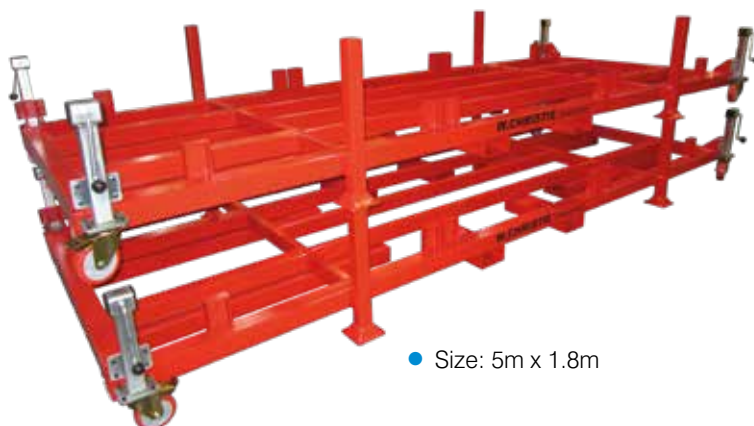
• Loaded with HVAC Storage Frame

HVAC Wheeled Storage Frames/Support Stacking Frames

Wheeled and stackable storage frames can be designed to your configuration and size requirements

Features:

- Forklift provision
- Adjustable wheel height



• Size: 5m x 1.8m



• Size: 2.5m x 1.8m

Locomotive Trailer

Designed to be towed behind shunting engine in maintenance shed for component/tooling transportation

Features:

- 3,000 Kg loading capability
- Forklift and overhead crane provision
- Parking brake



Adjustable Train Support Columns

Provides secure support for the underside of trains

Features:

- Working load limit of 20,000 Kg per column
- Forklift guide channels
- Height adjustable saddle with lock ring
- Fully portable system



Oil Pump

Delivering a measured volume of gear oil from an oil drum into a gearbox filler hole

Problem:

Ensuring a consistent and accurately measured quantity of oil is transferred to the gearbox.

Solution:

A portable battery oil pump, with a delivery rate of approx. 16L/sec (depending upon viscosity), achieving 60 - 100 refills between charges. The system also includes a top-up feature.



Order **FREE** the latest
Engineers Friend
Booklet and **Poster**



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No statement or data within this literature is warranted or guaranteed to be accurate.

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