

Manufacturer:
Thomson Engineering

Issue : 1
Valid From : 23/01/2018

TD15-01 THREADER DRAGGER

Product Description

TD15-01 Threader Dragger - A combination rail thimble and drag clamp for working with conductor Rail, serviceable and scrap rail.

Product Image



Scope of Acceptance: Full Acceptance

Full Acceptance is granted for use of the TD15-01 Threader Dragger in accordance with the terms and conditions identified on this certificate and associated reference documentation.

Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager under the ROGS regulations.

Reviewed by:

Authorised by:



Tom Riley
Product Acceptance Coordinator



Malcolm Miles
Professional Head of Plant

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Specific Conditions

The following Conditions are specific to the approved product/s contained within this Certificate. These conditions must be adhered to in addition to the Network Rail General Conditions contained within the "General Terms and Conditions" section. Failure to adhere to these conditions may result in the withdrawal or suspension of Acceptance of some, or all of the items contained within the accepted configuration.

Manufacturer

- 1) See Terms and Conditions, Section 2 – Manufacturer at the end of this document

User

1)	This product must be operated and maintained in accordance with the Original Equipment Manufacturer's instructions (OEM). All maintenance is to be conducted by the OEM and/or by suitably competent delegated maintainers.
2)	All staff must be deemed competent in accordance with OEM and industry training requirements.
3)	This product is only to be used in accordance with: <ul style="list-style-type: none"> • A compliant Safe System of Work • A work package plan, WARA/TRCS or company equivalent document • GE/RT8000 Rule Book • NR/PLANT/0200/MANUAL, Infrastructure Plant Manual • NR/L3/MTC/RCS0216/MP01 Use and Control of OTP, • NR/L3/MTC/RCS0216/MP06 Lifting and Thimbling Operations • NR/L3/MTC/RCS0216/MP07 Use of OTP with Attachments • Code of Practice COP0022 Pulling rail with road-rail excavator cranes • Code of Practice COP0005 Handling serviceable rail with RRV excavator cranes
4)	Prior to operation the user is responsible for conducting all pre use checks as defined within the Operators manual. If a defect is discovered before or during use the product must be immediately removed from service, labelled 'Do Not Use' and returned to the supplier.
5)	Not to be used in live 3rd or 4th rail areas.
6)	Possession working only - this product is only to be used in a possession in compliance with GE/RT8000 Rule Book.
7)	Grabber to be used for scrap rail only up to a maximum length of 20m (60ft).
8)	Grabber is not to be used to lift serviceable rail.
9)	The RCI of the host machine must be functional and in operation when handling rail of any type or condition.
10)	Threading activities authorised when working with new and old rail in accordance with NR/PLANT/0200/MANUAL, Infrastructure Plant Manual.
11)	All staff not involved with the operation of the equipment must remain out of the agreed exclusion zone.
12)	Never adjust the maximum hydraulic operating pressure above that recommended by the manufacturer; adjustments must only be made by authorised and trained personnel.
13)	Duplex communications must be used at all times.
14)	Appropriate PPE must be worn at all times whilst the equipment is being operated.
15)	The equipment must only be used in conjunction with a fully compatible host machine with the appropriate tractive effort.
16)	Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Technology Introduction Group.
17)	Maximum hydraulic pressures: <ul style="list-style-type: none"> • Dragger Circuit 250Bar • Threader Circuit 210Bar
18)	The equipment when not attached to the host machine must be placed in the supplied transport stillage.

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19)	Maximum Working Load (lift) 2500kg, Maximum Tow Load 10000kg.																														
20)	Maximum allowable length of conductor rail to be pulled is 183m (600ft).																														
21)	Maximum allowable length of serviceable rail to be pulled is 215m (709ft).																														
22)	Only rail lengths over 90m can be thimbled.																														
23)	Only designated manufacturer supplied 10 tonnes SWL auxiliary chain is to be used for pulling operations and must be fitted to a compatible host machine for all pulling operations.																														
24)	<p>Handling methods for rail are:</p> <table border="1"> <thead> <tr> <th>Rail Length</th> <th>Pick-&-Lift</th> <th>Pick-&-Carry</th> <th>Thimbling</th> <th>Lifting Accessory</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>Up to 6m</td> <td>Yes</td> <td>Yes</td> <td>No</td> <td>Chains, Camloks, Web slings Approved rail lifting beams</td> <td>May be single point lift</td> </tr> <tr> <td>6m to 20m</td> <td>Yes</td> <td>Yes</td> <td>No</td> <td>Beams required with 2 Camloks or Web-slings, Approved rail lifting beams</td> <td>Minimum 2 point lift</td> </tr> <tr> <td>20m to 90m <i>Not Bullhead</i></td> <td>Yes Laterally only</td> <td>No</td> <td>No</td> <td>Suitable thimble, with a minimum of 2 tonne capacity</td> <td>Pick and lift only (Max. height of lift 500mm)</td> </tr> <tr> <td>Above 90m <i>Not Bullhead</i></td> <td>Yes Laterally only</td> <td>No</td> <td>Yes</td> <td>Suitable thimble, with a minimum of 2 tonne capacity</td> <td>Thimbling (Max. height of lift 500mm)</td> </tr> </tbody> </table>	Rail Length	Pick-&-Lift	Pick-&-Carry	Thimbling	Lifting Accessory	Method	Up to 6m	Yes	Yes	No	Chains, Camloks, Web slings Approved rail lifting beams	May be single point lift	6m to 20m	Yes	Yes	No	Beams required with 2 Camloks or Web-slings, Approved rail lifting beams	Minimum 2 point lift	20m to 90m <i>Not Bullhead</i>	Yes Laterally only	No	No	Suitable thimble, with a minimum of 2 tonne capacity	Pick and lift only (Max. height of lift 500mm)	Above 90m <i>Not Bullhead</i>	Yes Laterally only	No	Yes	Suitable thimble, with a minimum of 2 tonne capacity	Thimbling (Max. height of lift 500mm)
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25)	Rollers approved for this purpose must be used to reduce the frictional forces between the rail and ground.																														
26)	<p>Exclusion Zones – all personnel are prohibited from being within:</p> <ul style="list-style-type: none"> • 3m from the rail • 5m from the rail ends during pulling operations 																														
27)	Maximum permitted operating speed when pulling or thimbling rail is 3mph (5kmph).																														
28)	Maximum pulling distance using chains in one planned movement is 200m. Maximum pulling distance without chains is 2m.																														

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Product Configuration

System or Complete Assembly

Part No.	Description	Catalogue No.
TD15-01	TD15-01 Threader Dragger (Thomson Threader Dragger)	0094/020137
DX505540	Threader Roller Bush (Thomson Threader Dragger)	0094/020138
WC50DX	Threader Roller Thrust Washer (Thomson Threader Dragger)	0094/020139
DX353930	Rail Head Roller Bush (Thomson Threader Dragger)	0094/020140
TD15-01-100	Dragger Jaw Wear Plate (Thomson Threader Dragger)	0094/020141
TD15-01-113	Threader Roller (Thomson Threader Dragger)	0094/020142
TD15-01-116	Threader Roller Shaft (Thomson Threader Dragger)	0094/020143
TD15-01-136	Rail Head Roller (Thomson Threader Dragger)	0094/020144
DX505540	Threader Roller Bush (Thomson Threader Dragger)	0094/020145
WC50DX	Threader Roller Thrust Washer (Thomson Threader Dragger)	0094/020146

Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
GB00553	BS EN ISO9001:2008	N/A	21/05/2015	T1
094034	RISQS Certificate	1	27 Jun 2017	T1
N/A	CSM System Definition	N/A	May 2016	T1
N/A	IPR Statement	N/A	03 May 2016	T1
N/A	Engineering Drawings	N/A	N/A	T1
N/A	EC Certificate of Conformity	N/A	Oct 2015	T1
N/A	Spare Parts	N/A	N/A	T1
N/A	Spare Parts (Wear)	N/A	N/A	T1
Email	FMECA	N/A	12 Nov 2016	T1
Email	Design Risk Assessment	N/A	12 Nov 2016	T1
TD15-01-DRA	Product Safety Case Part 1	2	Nov 2016	T1
TD15-01-DRA	Product Safety Case Part 2	2	10 Nov 2016	T1
Email	Matrix for FMECA and Design Risk Assessment	1	14 Nov 2016	T1
TD15-01-85	Tow Chain Assembly Drawing	1	16 May 2016	T1
TD15-01-86	Tow Chain Assembly Drawing	1	16 May 2016	T1
TD15-01-221	Chain Clevis Drawing	1	16 May 2016	T1
TD15-01-222	Chain Tow Plate Drawing	1	16 May 2016	T1
TD15-01-224	Grade 10 Eye Self Locking Hook	1	16 May 2016	T1
N/A	William Hackett Chain Specification	1	N/A	T1
TD15-01-90	Shear Link Assembly	1	16 May 2016	T1
MP/PL/14/F3	Six Monthly Maintenance Tick Sheet	3.08	26 May 2016	1
010317GBL01	Letter Authorising Trainer Assessor	N/A	1 Mar 2017	1
TM001	Balfour Beatty Rail Plant Training Manual	1	9 Mar 2017	1
N/A	Road Rail Operator Competency Assessment / Familiarisation / Training	N/A	10 Mar 2017	1
Report ID: 692	LOLER Report	3	01 Oct 2017	1

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Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
N/A	Final Report of Trial Operation TD15-01 Threader Dragger PA05/06670 amended 13 th December 2017	2	13 Dec 2017	1

Manuals and Training Materials

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
N/A	Operators Manual (includes Maintenance Instructions and Parts Manual)	Version 1	May 2016	1

Certificate History

Issue	Date	Issue History
T1	25/11/2016	First Accepted for Trial Use
T2	08/03/2017	Certificate extended to allow trial to continue
1	15/01/2018	First Full Acceptance

Contact Details

Manufacturer

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Sponsor

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General Terms & Conditions

1) General

- 1) This certificate can only be amended by Network Rail Technology Introduction Group. Any alterations made by a different person will invalidate the entire certificate.
- 2) Failure to abide by the requirements in this Certificate of Acceptance may invalidate the certificate, thereby restricting the right to operate the product and / or limiting the future supply and deployment of the product on the infrastructure.
- 3) Upon the review date this certificate and the product it relates to is invalid and not accepted for use. Manufacturers are to make an application for a review prior to the review date.

2) Manufacturer

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The Manufacturer shall:

- 1) Ensure that all products supplied comply with the standards defined in the Acceptance Requirements or otherwise documented as part of the assessment, including meeting the reliability requirements included in the Acceptance Requirements and in any deed of warranty for the relevant certificate number.
- 2) Notify Network Rail Technology Introduction Group:
 - a. Within 48 hours, of any deficiencies affecting the quality, functionality or safety integrity of the product (including corrective action undertaken or proposed).
 - b. Of any intended change to the accepted product; changes include:
 - i. a change to the product configuration (to the actual product or its application);
 - ii. a variation to or addition of manufacturing locations or processes;
 - iii. a change in the name or ownership of the manufacturing company;
 - iv. any changes to the ability or intention to support with technical services, spares or repairs.
- 3) The Manufacturer shall provide Network Rail Technology Introduction Group at least 12 (twelve) months notice of its intention to discontinue supply or to provide such notice as is reasonable if such discontinuance is outside its control and will offer the opportunity of a Last Time Buy to Network Rail together with date for last order placement and supply of the parts affected. The introduction of proposed alternative products shall be communicated to the Network Rail Technology Introduction Group.
- 4) Provide further copies of operating and maintenance manuals to purchasers / users of the product as necessary (including certificates of conformance, calibration etc).
- 5) Provide further copies of training manuals and an appropriate level of training to purchasers or users of the product as necessary (including certificates of conformance, calibration etc).
- 6) Where applicable, specialist technical support, repairs and servicing of the product shall be carried out by the Original Equipment Manufacturer (OEM) or authorised agent only.
- 7) Network Rail may request information from the manufacturer to prove product compliance with clauses 1 and 2 above and reserve the right to suspend and/or withdraw any application where information is not forthcoming within a reasonable timeframe.
- 8) In accordance with Network Rail's Quality Assurance Policy Statement 2011, where the specification and/or Product Acceptance Certificates specify quality assurance classifications (QA1 to QA5) for the products, the manufacturer shall comply with the specified level of quality assurance for each product and allow Network Rail access to carry out its quality assurance checks.
- 9) The manufacturer shall give Network Rail's representatives access at all reasonable times to its premises and allow them to inspect its quality systems and production methods and, if requested, to inspect, examine and test the products both during and after their manufacture and the materials being used in their manufacture.

3) Conditions of Use

Specifiers, installers, operators, maintainers, etc. using the product shall:

- 1) Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Technology Introduction Group.
- 2) Check that the application of use complies with the relevant certificate's scope of acceptance.
- 3) Report any defect if it is a design or manufacturing fault likely to affect performance and/or the safe operation of the railway in writing to Network Rail Technology Introduction Group.
- 4) Inform Network Rail Technology Introduction Group in writing of a change to the product configuration (or to the actual product or its application).
- 5) Operate, maintain and service the product in accordance with Network Rail standards and Operation and Maintenance manuals as appropriate.
- 6) Be appropriately trained and authorised for the installation, maintenance and use of the product.
- 7) Only send products for repair or reconditioning to the Original Equipment Manufacturer (OEM) or authorised agent.
- 8) Users are to be aware that Product Acceptance is not a substitute for design approval.

4) Compliance

Railways and Other Guided Systems (ROGS) Regulations

- 1) Where the product is to be used in areas where Network Rail is not the Infrastructure Manager (e.g. leased stations), the sponsor shall additionally obtain formal consent from the Infrastructure Manager for the locality where the equipment is to be installed. This may include a requirement for additional safety verification. The decision of that Infrastructure Manager is binding, and cannot be overridden by Network Rail except by the escalation processes established in the ROGS regulations
- 2) As required in Railway Group Standard GE/RT8270, at each use of this product the project or group responsible for installation and commissioning shall be required to demonstrate compatibility with:

- a. All rail vehicle types that have access rights over the area affected by the change
- b. Infrastructure managed by others
- c. Neighbours.

Railway Interoperability Regulations

- 3) For interoperable constituents of systems the project or group responsible for installation and commissioning shall be required to demonstrate compliance with the relevant Technical Specifications for Interoperability (TSI) where appropriate.
- 4) An authorisation from the national safety authority (i.e. the Railway Safety Directorate of the Office of Rail Regulation) is required before the equipment is to be used in revenue earning service.

5) Supply Chain Arrangements

- 1) Certificates of acceptance do not imply any particular quantity of supply nor any exclusivity of supply.
- 2) Products may be purchased by Network Rail or its agents, suppliers or contractors.
- 3) Manufacturers should note that it is not necessary to enter into any exclusive supply arrangements with resellers or other suppliers.

