

**Manufacturer:**  
Thomson Engineering and Design Ltd

**Issue :** 1  
**Valid From :** 28/03/18

## Thomson UK7SB16-02 7 Sleeper Spreader Beam

### Product Description

The Thomson UK7SB16-02 seven sleeper spreader beam is hydraulically operated attachment which can handle all United Kingdom sleeper variants.

The intended purpose of the equipment is to lift railway sleepers (track ties) from lorries or wagons, separate them to the correct spacing and lay them onto a pre-formed track bed. The device is an attachment suspended from the boom of an excavator and incorporates hydraulic systems powered by the host machine auxiliary hydraulic circuits (figure 1).

A purpose built transport stillage is available from the manufacturer for safely stowing and transporting the sleeper spreader beam. This stillage is fitted with hydraulic hose attachment points to help prevent the hose connections becoming contaminated. The stillage also features fork pockets and lifting eyes for handling and loading the device. The lifting eyes may also be used for securing the device in transit (figure 2).

### Product Image



Figure 2

### Scope of Acceptance: Full Acceptance

The use of the Thomson UK 7SB16-02 7 sleeper spreader beam must be in accordance with the conditions and limitations specified on this certificate and any 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 Co-ordinator



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 Instructions, industry training requirements and completed the TXM Familiarisation Course.
3)	Both the Machine Operator and Crane Controller must be fully conversant and competent with the Thomson UK7SB16-02 seven sleeper spreader beam user instructions as supplied by the OEM.
4)	This product is only to be used in accordance with: <ul style="list-style-type: none"> <li>• A compliant safe system of work</li> <li>• A work package plan (WPP), work activity risk assessment (WARA), task risk control sheet (TRCS) or company equivalent document</li> <li>• NR/PLANT/0200/MANUAL, Infrastructure Plant Manual</li> </ul>
5)	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.
6)	Not to be used in live 3rd or 4th rail areas.
7)	Possession working only - this product is only to be used in a possession in compliance with GE/RT8000 Rule Book.
8)	The rated capacity indicator (RCI) of the host machine must be functional and in operation during operation of the sleeper spreader beam.
9)	The Thomson UK 7SB16-02 seven sleeper spreader beam must only be operated in conjunction with an approved lift plan.
10)	All staff not involved with the operation of the equipment must remain out of the agreed exclusion zone.
11)	Never adjust the maximum hydraulic operating pressure above that recommended by the manufacturer; adjustments must only be made by authorised and trained personnel. Pressures: <ul style="list-style-type: none"> <li>• Normal operating pressure 150 Bar</li> <li>• Max pressure for grab circuit 210 Bar</li> <li>• Max pressure for rotating circuit 160 Bar</li> </ul>
12)	Duplex communications must be used at all times.
13)	Appropriate personal protective equipment must be worn at all times whilst the equipment is being operated.
14)	The equipment must only be used in conjunction with a fully compatible host machine with the appropriate capacity.
15)	Inform Network Rail Technology Introduction Group in writing of a change to the product configuration (or to the actual product or its application).
16)	Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Technology Introduction Group.
17)	The maximum safe working load is 2,450 Kg which <b>must not</b> be exceeded.
18)	Hydraulic quick release couplings fitted to the host vehicle should only be of the type which prevents fluid discharge to the environment on connection and release.

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19)	Before connecting or disconnecting the Thomson UK7SB16-02 seven sleeper spreader beam from the host machine the system pressure must be fully released to mitigate the potential for injury by switching off the host vehicle engine and fully releasing the pressure left standing in the system.
20)	The Thomson UK 7SB16-02 seven sleeper spreader beam <b>must not</b> be used with any line open (ALO). If any lines are open to traffic an ALO scoping plan must be produced.
21)	The Thomson UK 7SB16-02 seven sleeper spreader beam must conform to the Lifting Operations and Equipment Regulations (LOLER) at all times.
22)	Staff are not permitted to enter or stand under the Thomson UK 7SB16-02 seven sleeper spreader beam when attached to the host machine.
23)	Parts of the machine encroach below rail head level during use. A site survey shall be undertaken to assess potential damage to the infrastructure equipment prior to use.
24)	The sleeper spreader beam <b>must be</b> transported and stowed using the purpose built transport stillage at all times.
25)	Arrangements are made to retro fit the modified hose restraints to the equipment already in use.

## Product Configuration

### System or Complete Assembly

Part No.	Description	Catalogue No.
UK7SB16-02	Thomson UK7SB16-02 Seven Sleeper Spreader Beam	0094/003037
UK7SB16-02-TS-10	Thomson Transport & Stowage Stillage	0094/003038

## Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
00792 / 24621	Management System Certification Assessment Report by TUV Nord UK	-----	12 Oct 16	T1/2
GB00553	BS EN ISO 9001 Certificate	-----	Expires 23 May 2018	T1/2
-----	Certificate of Conformity	-----	Nov 16	T1/2
094034	RISQS Certificate	-----	Jun 17	T1/2
-----	System Definition Statement	-----	01 Apr 17	T1/2
-----	Design Risk Assessment	-----	-----	T1/2
-----	FMECA	-----	-----	T1/2
-----	IPR Statement	-----	03 May 16	T1/2
-----	RIS1701 Clause by Clause Statement	-----	May 17	T1/2
UK7SB16-02-AC-01	General Arrangement Drawing	-----	-----	T1/2
UK7SB16-02-Inst-01	General Arrangement Drawings and Parts Numbers	1	Apr 17	T1/2
6031701	LOLER Certificate Report of a Thorough Examination of Lifting Equipment	-----	06 Mar 17	T1/2

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## Manuals and Training Materials

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
UK7SB16-02-Inst-01	Operating and Maintenance Instructions	1	Apr 17	T1/2
CMS/P/02/LP/23	TXM Plant Operator Specific Training Thomson	1	02 Aug 17	T1/2
UK7SB16-02-Inst-01	Operating and Maintenance Instructions & Parts Book	3	March 2018	1

## Certificate History

Issue	Date	Issue History
T1	04 Aug 2017	First accepted for trial use
T2	16 Feb 2018	Certificate extended by one month to allow closeout report to be compiled
1	28 Mar 2018	Full Acceptance granted

## 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

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);

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- 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
- 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 or 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.