

Manufacturer:
Abtus Ltd**Issue :** 2
Valid From : 06/02/2018**ABT7000 Abtus Max Cyclic Top Measurement Device (CTMD)****Product Description**

The Abtus ABT7000 is a measuring device which records cyclic top geometry while being pushed by an operator at walking speed.

Product Image**Scope of Acceptance**

The ABT7000 Abtus Cyclic Top Measurement Device (CTMD) is granted Full Product Acceptance in accordance with the terms and conditions identified on this certificate and associated reference documentation.

Network Rail Acceptance Panel (NIRAP) 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:

Tom Riley
Product Acceptance Co-ordinator

Authorised by:

Malcolm Miles
Professional Head of Plant

Gareth Evans
Professional Head of Track

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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)	The ABTUS Max ABT7000 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)	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 • NR/L2/RMVP/0200, Infrastructure Plant Manual
3)	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.
4)	Appropriate PPE must be worn at all times whilst the equipment is being operated.
5)	Inform Network Rail Technology Introduction Group in writing of a change to the product configuration (or to the actual product or its application).
6)	Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Technology Introduction Group.
7)	IP Rating = 65 dust-proof and wash-down capable.
8)	The equipment is designed to be lifted in its individual components, shall only be lifted fully assembled in an emergency and in accordance with the manufacturer's instructions.
9)	Due to the lightweight construction of the Abtus Max ABT7000 the trolley cannot measure cyclic top faults which are a result of track voiding. A track that passed the ABT7000 cyclic top measurement has to be checked for voiding issues before it can be established to be free of cyclic top faults.
10)	The Abtus Max ABT7000 has to be pushed at walking speed.
11)	The equipment is not to be towed under any circumstances.

Product Configuration

System or Complete Assembly

Part No.	Description	Catalogue No.
ABT7000	Cyclic Top Measuring Device (Abtus Ltd)	0094/017058
150/996	Panasonic FZ-G1 Tablet (Abtus Ltd)	0094/017056
5103-27	Tablet Holder (Abtus Ltd)	0094/017059
150/1029	Li-Ion Battery Pack (Abtus Ltd)	0094/017060
150/324	Li-Ion Battery Pack Charger (Abtus Ltd)	0094/017061
7000-2SA	Transit Case Assembly (Abtus Ltd)	0094/017062
ABT7000 GUI	Cyclic Top Graphical User Interface Software (Abtus Ltd)	0094/017063

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Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
Email	Cyclic Top Test/Run Data	-----	Various	1
0274-AS-0212-V0.27-170726A	Assembly Drawings	0.27	28/07/2017	1
SKMBT-C28017060108330	Assembly Drawings	1	15/05/2017	1
SKMBT-C28017060108331	Assembly Drawings	1	15/05/2017	1
SKMBT-C28017060108340	Assembly Drawings	1	15/05/2017	1
SKMBT-28017060108350	Assembly Drawings	1	15/05/2017	1
32311	Certificate of Authorisation of Variation	-----	21/08/2017	1
RA01	Hazard and Operability Study (HAZOP) – Product Safety Risk Assessment	1	19/06/2017	1
RA01	Hazard and Operability Study (HAZOP) – Product Safety Risk Assessment	2	21/08/2017	1
FMEA01	User Information for Operation and Maintenance Failure Mode and Effects Analysis (FMEA)	1	19/06/2017	1
FMEA01	User Information for Operation and Maintenance Failure Mode and Effects Analysis (FMEA)	2	21/08/2017	1
-----	Spare Parts List	-----	-----	1
-----	Scope of Operation Statement	-----	-----	1
-----	CoC Image Label	-----	-----	1
-----	Abtus Cyclic Top Trolley Site Visit	-----	16/12/2016	1
-----	Static Brake Test Results	-----	22/08/2017	1
-----	Dynamic Brake Test Results	-----	21/08/2017	1
028204	RISQS Certificate	-----	Exp 11/10/2017	1
FM25692	BS ISO 9001 Certificate	-----	Exp 14/09/2018	1
SKMBT-C28017060108390	IPR Statement	-----	01/06/2017	1
SKMBT-C224e17082109050	Declaration of Conformity	-----	21/08/2017	1
-----	Software Version Statement (Version 1)	-----	08/06/2017	1
ETSW2520/EMF	EMF Certificate of Conformity	-----	22/08/2017	1
W2519-Test Certificate-300 328V2.1.1	Radio Verification Test	-----	18/08/2017	1
ETSW2519/EN	Declaration of Conformity	-----	22/08/2017	1
ETSW2518/EN	Declaration of Conformity	-----	22/08/2017	1
W2518-Test Certificate-EN50121-4	Declaration of Conformity	-----	18/08/2017	1

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Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
-----	3 rd and 4 th rail critical review report from James Snowdon Senior Engineer (Contact Systems) and Ian Barber (Principle Engineer Track)	-----	05/01/2018	2

Manuals and Training Material

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
7000-1	User Manual	1	-----	1
-----	Step by Step Training Guide	-----	-----	1

Certificate History

Issue	Date	Issue History
1	05/09/2017	First accepted for use.
2	06/02/2018	3 rd and 4 th rail restrictions removed after confirmation via critical report from Contact Systems

Contact Details

Manufacturer

Sam Parrett
Abtus Ltd
Falconer Rd, Haverhill
CB9 7XU
www.Abtus.com

Sponsor

Ian Barber – Principle Engineer
Track STE
Network Rail
Ian.Barber@networkrail.co.uk

Lead Reviewing Engineer

John Watt – Engineer M&EE (Plant and T&RS)-
Network Rail
<mailto:john.watt@networkrail.co.uk>

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).

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- 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
- 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.

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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.