

Manufacturer:
Worlifts Ltd

Issue : 2
Valid From : 08/09/2017

Norbar Evotorque Torque Tool

Product Description

The Evotorque is an electronic torque tool designed for applying torque to threaded fasteners. There are models to cover torque capacities of 1000 N·m to 4000 N·m. The unique 'Intelligent Joint Sensing' technology will accurately tighten to the correct torque without the risk of excess overshoot or undershoot that is common in other electric tools. For fasteners specified in angle, there is an angle mode. Positive confirmation of correct joint tightening is shown on the tool. Models are:

ET-72-1000 - 110 - Range 200 - 1000Nm
 ET-72-1350 - 110 - Range 270 - 1350Nm
 ET-72-2000 - 110 - Range 400 - 2000Nm
 ET-92-4000 - 110 - Range 800 - 4000Nm

Variants with Data Logging capabilities

ET2-72-1000 - 110 - Range 200 - 1000 Nm
 ET2-72-1350 - 110 - Range 270 - 1350 Nm
 ET2-72-2000 - 110 - Range 400 - 2000 Nm
 ET2-92-2700 - 110 - Range 540 - 2700 Nm
 ET2-92-4000 - 110 - Range 800 - 4000 Nm

Product Image



Scope of Acceptance

Full Acceptance granted to the use of this product in line with the conditions and limitations defined on this certificate for the Evotorque group of tools displayed shown below:

ET-72-1000 - 110 - Range 200 – 1000Nm
 ET-72-1350 - 110 - Range 270 – 1350Nm
 ET-72-2000 - 110 - Range 400 – 2000Nm
 ET-92-4000 - 110 - Range 800 – 4000Nm
 ET2-72-1000 - 110 - Range 200 - 1000 Nm (Data Logging)
 ET2-72-1350 - 110 - Range 270 - 1350 Nm (Data Logging)
 ET2-72-2000 - 110 - Range 400 - 2000 Nm (Data Logging)
 ET2-92-2700 - 110 - Range 540 - 2700 Nm (Data Logging)
 ET2-92-4000 - 110 - Range 800 - 4000 Nm (Data Logging)

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:



Usha Trivedi
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
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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 • NR/PLANT/0200/MANUAL, Infrastructure Plant Manual
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)	Only the products listed below are authorised by this certificate: <ul style="list-style-type: none"> • ET-72-1000-110 – Range 200 – 1000Nm • ET-72-1350-110 – Range 270 – 1350Nm • ET-72-2000-110 – Range 400 – 2000Nm • ET-92-4000-110 – Range 800 – 4000Nm • ET2-72-1000 - 110 - Range 200 - 1000 Nm (Data Logging) • ET2-72-1350 - 110 - Range 270 - 1350 Nm (Data Logging) • ET2-72-2000 - 110 - Range 400 - 2000 Nm (Data Logging) • ET2-92-2700 - 110 - Range 540 - 2700 Nm (Data Logging) • ET2-92-4000 - 110 - Range 800 - 4000 Nm (Data Logging)
7)	Appropriate PPE must be worn at all times whilst the equipment is being operated.
8)	Inform Network Rail Product Acceptance Team in writing of a change to the product configuration (or to the actual product or its application).
9)	Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Product Acceptance Team.
10)	Equipment weights: <ul style="list-style-type: none"> • ET-72-1000-110 – Range 200 – 1000Nm = 10.4kg • ET-72-1350-110 – Range 270 – 1350Nm = 10.4kg • ET-72-2000-110 – Range 400 – 2000Nm = 10.8kg • ET-92-4000-110 – Range 800 – 4000Nm = 12.85kg • ET2-72-1000 - 110 - Range 200 - 1000 Nm (Data Logging) (as above) • ET2-72-1350 - 110 - Range 270 - 1350 Nm (Data Logging) (as above) • ET2-72-2000 - 110 - Range 400 - 2000 Nm (Data Logging) (as above) • ET2-92-2700 - 110 - Range 540 - 2700 Nm (Data Logging) (12.85kg) • ET2-92-4000 - 110 - Range 800 - 4000 Nm (Data Logging) (as above)
11)	Noise is 70 dB(A).

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12)	HAVS Data: Time to reach EAV 5hrs 20mins Time to reach ELV 21hrs 22mins
13)	IP Rating of 44 - Protected from tools and small wires greater than 1mm. Protected from water spray from any direction.

Product Configuration

System or Complete Assembly

Part No.	Description	Catalogue No.
ET-72-1000-110 – Range 200 – 1000Nm	Norbar Evotorque Torque Tool – Range 200 – 1000Nm	094/002064
ET-72-1350-110 – Range 270 – 1350Nm	Norbar Evotorque Torque Tool – Range 270 – 1350Nm	094/002065
ET-72-2000-110 – Range 400 – 2000Nm	Norbar Evotorque Torque Tool – Range 400 – 2000Nm	094/002066
ET-92-4000-110 – Range 800 – 4000Nm	Norbar Evotorque Torque Tool – Range 800 – 4000Nm	094/002067
ET2-72-1000 - 110 - Range 200 - 1000 Nm (Data Logging)	Norbar Evotorque Torque Tool – Range 200 – 1000Nm (data logging)	094/002071
ET2-72-1350 - 110 - Range 270 - 1350 Nm (Data Logging)	Norbar Evotorque Torque Tool – Range 270 – 1350Nm (data logging)	094/002072
ET2-72-2000 - 110 - Range 400 - 2000 Nm (Data Logging)	Norbar Evotorque Torque Tool – Range 400 – 2000Nm (data logging)	094/002073
ET2-92-2700 - 110 - Range 540 - 2700 Nm (Data Logging)	Norbar Evotorque Torque Tool – Range 540 – 2700Nm (data logging)	094/002074
ET2-92-4000 - 110 - Range 800 - 4000 Nm (Data Logging)	Norbar Evotorque Torque Tool – Range 800 – 4000Nm (data logging)	094/002075
26969	Hard Plastic Peli Case, Storage and Transportation Box For Use With: <ul style="list-style-type: none"> ET-72-1000-110 ET-72-1350-110 ET-72-2000-110 ET2-72-1000 – 110 (data logging) ET2-72-1350 – 110 (data logging) ET2-72-2000 – 110 (data logging) 	094/002068
26971	Hard Plastic Peli Case, Storage and Transportation Box For Use With: <ul style="list-style-type: none"> ET-92-4000-110 ET2-92-2700 – 110 (data logging) ET2-92-4000 – 110 (data logging) 	094/002069

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Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
002 - 18165.B06	Assembly Drawing	1	Oct 2013	1
003 - 18166.B06	Assembly Drawing	1	Oct 2013	1
004 - 18167.B08	Assembly Drawing	1	Oct 2013	1
005 - 18169.B08	Assembly Drawing	1	Oct 2013	1
006 - 18171.B12 Assembly Drawing	Assembly Drawing	1	Oct 2013	1
007 - 18830	Assembly Drawing	7	Dec 2016	1
008 - 18831	Assembly Drawing	7	Dec 2016	1
009 - 18832	Assembly Drawing	7	Dec 2016	1
010 - 18925	Assembly Drawing	7	Dec 2016	1
011 - 19207	Assembly Drawing	7	Dec 2016	1
012 - 39600	Assembly Drawing	10	Oct 2016	1
Letter	IPR Statement	-----	-----	1
-----	Part Numbers	-----	-----	1
QA57	Declaration of Conformity	2	09 Oct 2013	1
-----	Statement of Delivery	-----	-----	1
QA41	Risk Statement	3.0	08 Feb 2017	1
-----	RISQS Certificate	-----	08 Jun 2017	1
75939089 Report 1	EMC Test Report	1	Jun 2017	1
Email	Confirmation of EMC/EMF Acceptance by EMC Specialist	-----	21 Jun 2017	1

Manuals and Training Materials

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
-----	Operator and Maintenance Manual	4	-----	1
-----	Operator and Maintenance Manual ET2 variants	2	-----	2

Certificate History

Issue	Date	Issue History
1	23/06/2017	First Accepted for Use
2	08/09/2017	Certificate amended to include data logging variants

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);
 - 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.