



Torque Calibration

Introduction

This section covers the comprehensive range of Torque Calibration equipment manufactured by Gedore Torque.

Torque calibration equipment is used for the testing, calibration and recalibration of Torque Tools. This ensures that torque equipment operates to peak performance and guarantees absolute and consistent accuracy and adherence to national and international standards.

It also ensures that potential tooling problems are identified before they arise, ensuring that lifetime ownership costs are minimised. Torque Calibration equipment is also used to predict the behaviour of fasteners and to recommend optimum torque.

As an alternative to purchasing calibration equipment, the Gedore Torque service centre offers a wide range of Calibration Services. These can be carried out at our UKAS accredited Calibration Laboratory.

Torque Calibration Analysers

Torque Calibration equipment is based upon Torque Calibration Analysers, of which there are two basic types: Electronic and Mechanical.

Electronic Torque Calibration Analysers

Our modern range of Digital Torque Calibration Equipment is highly accurate, reliable and easy to use. It enables the user to download test results, test power tools, select different units of measurement and carry out calibration beyond the scope of mechanical calibration devices.

Mechanical Torque Calibration Analysers

Mechanical Torque Analysers offers the user a low cost, robust and easy to use device, that's designed to set and calibrate low range torque tools. These Analysers will give many years of accurate and reliable service.

Functions of Torque Calibration Analysers

This chart summarises the functions of the various Torque Calibration Analysers. Further details are on the following pages.

| Torque Calibration Analysers | Screwdriver Testing | Wrench Testing | Powered Tool Testing | Memory Capability | PC Download Capability | Interchangeable Sensors |
|------------------------------|---------------------|----------------|----------------------|-------------------|------------------------|-------------------------|
| CAPTURE System | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CAPTURE Hub | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MTP | ✓ | - | - | - | - | - |
| MTS | ✓ | ✓ | - | - | - | - |
| DREMOTEST E | ✓ | ✓ | - | - | ✓ | - |

CAPTURE Display

This intuitive easy to use Display can be integrated with your existing Sensors. This enables you to benefit from the industry-leading CAPTURE system, whilst minimising investment.

Cost-effective. Minimise investment, as the CAPTURE Display is designed to integrate with customers' existing industry standard nominal 2mV/V Sensors

Carry Case included. To protect the CAPTURE Display when not in use it is supplied complete in a high impact plastic carry case

Ease of use. Designed to allow users to become productive quickly due to its intuitive features, such as easy to navigate menus, tool database and Plug & Play integration with CAPTURE Sensors

Fully Inclusive. The following items are included with the Display and are stored in the Carry Case - USB Power Cable (for charging from Mains or PC and also used for data transfer), Power Supply (multi-national), Calibration Certificate, Start Up Guide and Instructions

Long Life Battery. Work for longer between battery charges as the unit is fitted with a long life Lithium-ion battery and has an auto power down mode

Memory. CAPTURE Display can store 500 tools and 2000 data readings in the onboard memory

Versatility. Design allows static laboratory use and mobile data collection using an onboard memory and rechargeable battery. The data can then be transferred to PC via USB connection



CAPTURE Display



CAPTURE Manager

| Order Code | Model |
|------------|--|
| 038700 | CAPTURE Display |
| 038710 | CAPTURE Manager - PC Software |
| 038703 | CAPTURE Display - 4 Way Switch |
| 036226 | CAPTURE Cable - CAPTURE Display to Custom Sensor |
| 036246 | CAPTURE Cable - CAPTURE Display to CAPTURE Sensor |
| 036251 | CAPTURE Cable - CAPTURE Display to SDX Screwdriver |
| 036256 | CAPTURE Cable - CAPTURE Display to ETX Wrench |

CAPTURE Sensor

Torque Range from 0.1 to 1500 N.m

The CAPTURE Sensor is part of the industry-leading CAPTURE system, providing highly accurate torque measurement for Hand and Power Torque Tools.

CAPTURE Sensor CS 10



| Order Code | Model |
|---------------|-------------------------------------|
| 038771 | CAPTURE Sensor ISO 1500/90° Adaptor |
| D18205 | CAPTURE Sensor ISO-A Mount |
| 038772 | CAPTURE Sensor Quick Change Plate |



CAPTURE Sensor with optional rundown fixture

Calibrated range: 10% to 100% of capacity

Carry Case. To protect the Sensor when not in use it is supplied in a high impact plastic carry case

Flexible. Built-in flexibility as the sensor can be mounted horizontally or vertically without the need for any accessories

Ease of Use. Fast to set up when used with a CAPTURE Display due to the imbedded Quicktec technology that passes all the Sensor information to the Display

Optional Torque Loading System. Remove human error from testing by using the CAPTURE Sensor with the ISO 1500/90° Torque Loading System (**Adaptor required – see page 79**)

Quick Change Plate. For users with limited space who need to change Sensors between tests the Quick Change Plate increases calibration productivity

UKAS Certification. Sensors come complete with a UKAS certificate to BS 7882: class 1 or better

| Order Code | Model | Range | Drive | k mm H x W x D | kg | Hole Centres (mm) | Mounting Hole Size | Fixings Supplied | |
|---------------|---------------|--------------|---------------|-------------------|------|-------------------|--------------------------|------------------|---------------|
| 038802 | CS 1.5 | 0.1-1.5 N.m | $\frac{1}{4}$ | 62 x 85 x 65 | 0.50 | 56 | M8 x 1.25 (10 Deep Min) | M8 x 50 * | P34320 |
| 038805 | CS 2 | 0.2-2 N.m | $\frac{1}{4}$ | 62 x 85 x 65 | 0.50 | 56 | M8 x 1.25 (10 Deep Min) | M8 x 50 * | P34320 |
| 037110 | RF 2 Rundown | 0.2-2 N.m | $\frac{1}{4}$ | – | 0.50 | – | – | M4 x 8 | P15900 |
| 038807 | CS 5 | 0.5-5 N.m | $\frac{1}{4}$ | 62 x 85 x 65 | 0.50 | 56 | M8 x 1.25 (10 Deep Min) | M8 x 50 * | P34320 |
| 037120 | RF 5 Rundown | 0.5-5 N.m | $\frac{1}{4}$ | – | 0.50 | – | – | M4 x 8 | P15900 |
| 038810 | CS 10 | 1-10 N.m | $\frac{1}{4}$ | 62 x 85 x 65 | 0.50 | 56 | M8 x 1.25 (10 Deep Min) | M8 x 50 * | P34320 |
| 038815 | CS 25 | 2.5-25 N.m | $\frac{3}{8}$ | 62 x 85 x 65 | 0.50 | 56 | M8 x 1.25 (10 Deep Min) | M8 x 50 * | P34320 |
| 037130 | RF 25 Rundown | 2.5-25 N.m | $\frac{1}{2}$ | – | 0.50 | – | – | M4 x 8 | P15900 |
| 038820 | CS 50 | 5-50 N.m | $\frac{3}{8}$ | 62 x 85 x 65 | 0.57 | 56 | M8 x 1.25 (10 Deep Min) | M8 x 50 * | P34320 |
| 038825 | CS 100 | 10-100 N.m | $\frac{1}{2}$ | 62 x 85 x 65 | 0.60 | 56 | M8 x 1.25 (10 Deep Min) | M8 x 50 * | P34320 |
| 038830 | CS 250 | 25-250 N.m | $\frac{1}{2}$ | 82 x 120 x 87 | 1.45 | 79 | M12 x 1.75 (16 Deep Min) | M12 x 1.75 * | P34330 |
| 038835 | CS 500 | 50-500 N.m | $\frac{3}{4}$ | 82 x 120 x 87 | 1.6 | 79 | M12 x 1.75 (16 Deep Min) | M12 x 1.75 * | P34330 |
| 038845 | CS 1500 | 150-1500 N.m | 1 | 100 x 165 x 134 | 4.00 | 125 | M16 x 2.0 (20 Deep Min) | M16 x 90 * | P34340 |

* Socket Cap Head Screw

CAPTURE Hub

CAPTURE Hub

The Gedore Torque CAPTURE Hub is the latest addition to the industry-leading Capture range of calibration equipment and is available from 2017. A lineside torque analyser for production power tools, it provides highly accurate measurement

both clockwise or anti clockwise, as well as hand tools if required, and incorporates an integrated Screen and Sensor. It is portable enough to be used as part of a mobile calibration centre and robust enough to be used in a production environment.



CAPTURE Hub: the latest addition to the Capture range

Calibrated range. 10% to 100% of capacity

Easy to Repair. Modular design allows for simple component replacement

Cost-effective. Minimise investment, as the CAPTURE Hub is designed to be a standalone solution, or to integrate with customers' existing Capture components as well as other industry standard nominal 2mV/V Sensors

Ease of use. Intuitive software design is similar to CAPTURE Display allowing existing Capture users to be familiar with the architecture and new users to become productive quickly, with its easy to use menus and Plug & Play functionality

Flexibility. The CAPTURE Hub can integrate with CAPTURE Manager PC software (Order Code 038710) and users with extra Sensors can plug them directly into the external port on the side of the CAPTURE Hub. The unit can also be mounted horizontally or vertically to meet the existing setups of customers

Long Life Battery. Work for longer between battery charges as the unit is fitted with an improved long life Lithium-ion battery and has a customisable auto power down mode

Carry Case. To protect the CAPTURE Hub when not in use it is supplied in a high impact plastic carry case

Calibration Certificate. All CAPTURE Hub systems are supplied complete with in house Certificate which is traceable to International Standards. Accuracy +/-1% of reading. UKAS certification is available on request at additional cost

Versatility. The design allows static laboratory use and mobile data collection using an on-board memory and rechargeable battery. This means that the system can be used as part of mobile calibration centre and also at the point of use. The data can be transferred to PC via USB connection

Yet more versatility. Can be used with Optional Torque Loading System. Remove human error from testing by using the CAPTURE Hub with the ISO-A Loading System (**Adaptor required – see page 79**)

Tool Storage and memory. The CAPTURE Hub can store 50 tools and 2000 readings



Rundown fixture

For more information: Tool Selector; gedore-torque.com/tool-selector Telephone; +44 (0) 1483 894 476
Videos; www.youtube.com/gedore-torque Email; salesandrepairs@gedore-torque.com

Want to know how to use this tool?

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| Order Code | Model | Range | Drive | k mm H x W x D | kg | Hole Centres (mm) |
|------------|---------------|------------|-------|-------------------|------|-------------------|
| 036910 | CH 1 | 0.1-1 N.m | 1/4" | 50 x 200 x 110 | 0.50 | 56 |
| 036920 | CH 2 | 0.2-2 N.m | 1/4" | 50 x 200 x 110 | 0.50 | 56 |
| 037110 | RF 2 Rundown | 0.2-2 N.m | 1/4" | 62 x 93 x 32 | 0.50 | |
| 036930 | CH 5 | 0.5-5 N.m | 1/4" | 50 x 200 x 110 | 0.50 | 56 |
| 037120 | RF 5 Rundown | 0.5-5 N.m | 1/4" | 62 x 78 x 32 | 0.50 | |
| 036940 | CH 25 | 2.5-25 N.m | 3/8" | 50 x 200 x 110 | 0.50 | 56 |
| 037130 | RF 25 Rundown | 2.5-25 N.m | 1/2" | 62 x 120 x 32 | 0.50 | |

CAPTURE Manager

The CAPTURE Manager is PC Software that allows storage, management and analysis of tools and data readings. It is part of the

industry-leading CAPTURE system, providing highly accurate torque measurement for Hand and Power Torque.

Data management and analysis.

Manage tool and test data through the CAPTURE Manager PC software. The software also makes analysing the data quick and easy through integration with Microsoft Excel®

Data storage.

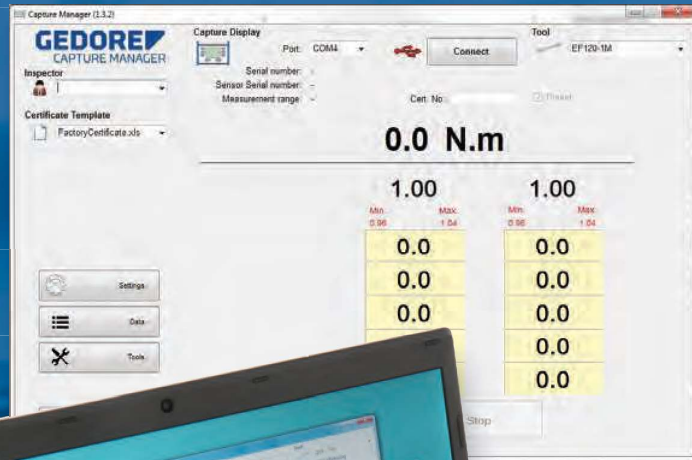
The CAPTURE Manager PC software allows unlimited storage of tools and data readings that can be uploaded and downloaded to the CAPTURE Display via USB connection

Test Wizard.

Ensures tools are performing to the required standard through the ISO 6789 test wizard. This clear and easy to use feature guides the user through the test procedure

Tool Calibration Certificates.

Tool traceability can be achieved as the CAPTURE Manager PC software can generate customised calibration certificates to the requirements of ISO 6789



CAPTURE Manager



Order Code

038710 CAPTURE Manager - PC Software

Rotary Torque Sensors

Torque range from 0.2 to 1400 N.m

These Sensors provide highly accurate torque measurement for Hand and Power Torque Tools. They can be used in conjunction with our CAPTURE Display or with your current Torque Analyser. Connect between tool and joint, to measure the actual torque being applied from the joint to the fastener.

Accurate measurement. These Sensors are designed to ensure your tightening process is within acceptable limits with a high degree of certainty. The Rotary Torque Sensor is the ideal torque-auditing tool for testing the actual torque being applied on the assembly application. By connecting a rotary torque sensor between an electric or pneumatic tool and assembly application, you can monitor the torque being applied from the tool to fastener or bolt

Inline connection. Designed to be placed inline with the tooling, they measure the actual torque being applied on the assembly application, accurate to 0.3% of maximum torque applied. By connecting a rotary torque sensor between an electric or pneumatic tool and assembly application, you can monitor the torque being applied from the tool to fastener or bolt

UKAS certificates. Rotary Sensors come complete with UKAS certificates to BS7882

Versatile. These Sensors are designed to be compatible with most industry standard devices

Work with most Torque Analysers. A cost effective solution, as in most cases, there is no need to upgrade



To download detailed Product Card go to www.gedore-torque.com

For more information: Tool Selector; gedore-torque.com/tool-selector Telephone; +44 (0) 1483 894 476
Videos; www.youtube.com/gedore-torque Email; salesandrepairs@gedore-torque.com

Want to know how to use this tool?



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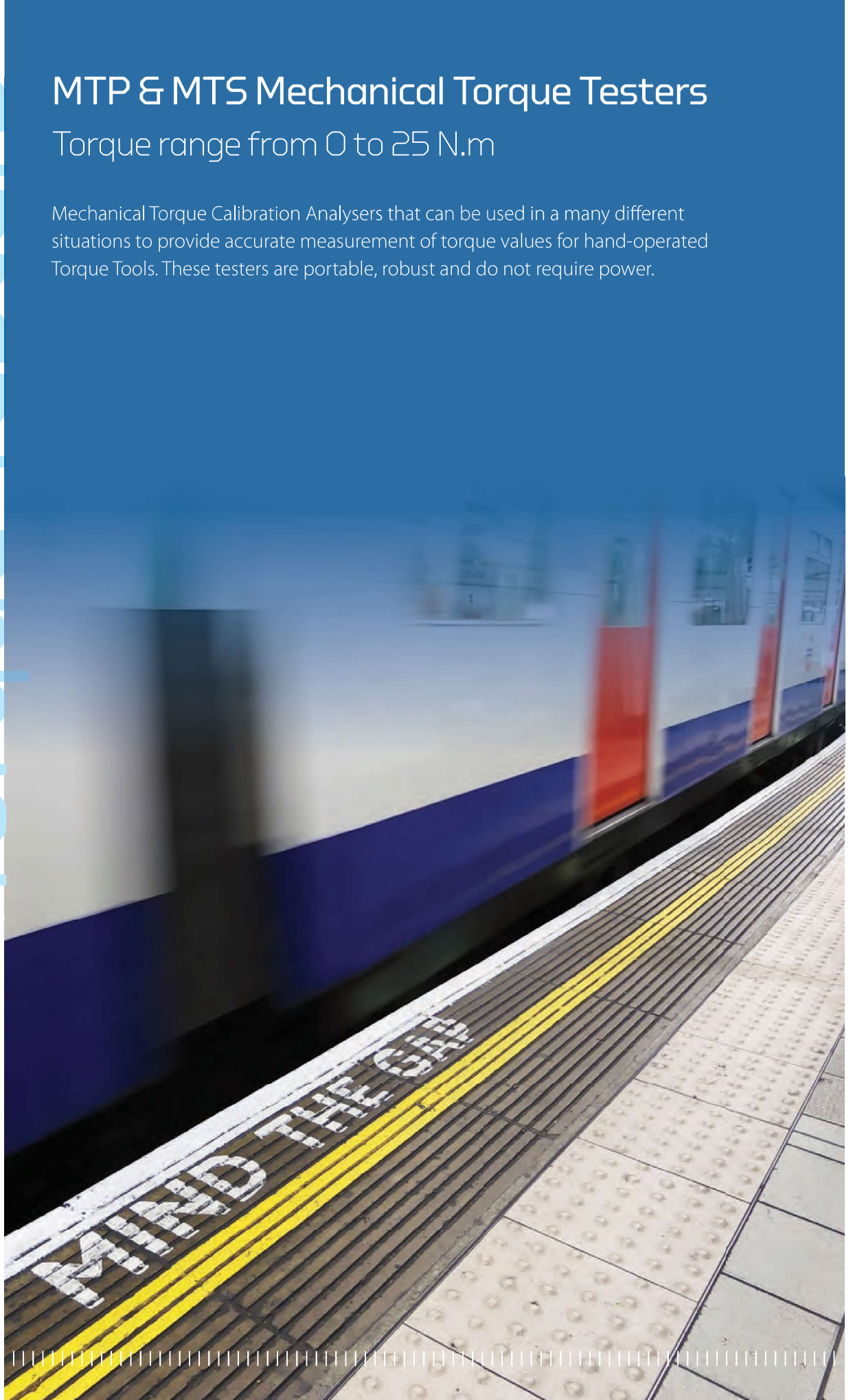
| Order Code | Model | Calibrated Range | | Drive | Maximum RPM | | Width k mm | Height k mm | Depth k mm | kg |
|------------|------------|------------------|-------|-------|-------------|--------------|---------------|----------------|---------------|----|
| | | ISO | Drive | | Continuous | Intermittent | | | | |
| 036510 | XR 2 HD | 0.2-2 N.m | 1/2 | 5000 | 11000 | 116 | 56.0 | 68.0 | 0.21 | |
| 036520 | XR 5 HD | 0.5-5 N.m | 3/4 | 5000 | 11000 | 116 | 56.0 | 68.0 | 0.21 | |
| 036530 | XR 20 HD | 2-20 N.m | 1 | 5000 | 11000 | 116 | 56.0 | 68.0 | 0.21 | |
| 036540 | XR 20 SD | 2-20 N.m | 1/4 | 5000 | 11000 | 71.5 | 56.0 | 71.5 | 0.20 | |
| 036550 | XR 75 SD | 7.5-75 N.m | 3/8 | 2500 | 10000 | 77.0 | 56.0 | 74.0 | 0.24 | |
| 036560 | XR 180 SD | 18-180 N.m | 1/2 | 2500 | 7600 | 87.0 | 58.0 | 82.5 | 0.43 | |
| 036570 | XR 500 SD | 50-500 N.m | 3/4 | 2000 | 5000 | 106 | 60.0 | 93.5 | 0.78 | |
| 036580 | XR 1400 SD | 140-1400 N.m | 1 | 1000 | 4400 | 125 | 64.5 | 104 | 1.50 | |

Torque Testers

MTP & MTS Mechanical Torque Testers

Torque range from 0 to 25 N.m

Mechanical Torque Calibration Analysers that can be used in a many different situations to provide accurate measurement of torque values for hand-operated Torque Tools. These testers are portable, robust and do not require power.



MTP & MTS Mechanical Torque Testers

MTP 10 & MTS 35, 130, 400, 1200 & 2500

Accurate measurement. Designed to monitor low torque values for Hand operated Torque Tools, providing +/-2% accuracy

Ease of use. Perfect for use by operators of any skill level, as the robust design eliminates the fear of damage caused by overloading

Fast results. The MTS Testers are designed to quickly give confidence that your Torque Tools are operating within limits. The easy to read analogue dial, peak torque and limit pointers all work together to give the operator instant confirmation of tool performance

Long tool life. High quality and robust design, with a two year warranty

End Fittings. Compatible with Setting adaptors see page 84

Versatile. Able to operate in a wide variety of environments and situations from shop floor to field operations as the MTS and MTP have no requirement for power

Servicing. Regular servicing is essential to ensure precision and consistent accuracy



For more information: Tool Selector; gedore-torque.com/tool-selector Telephone; +44 (0) 1483 894 476 Videos; www.youtube.com/gedore-torque Email; salesandrepairs@gedore-torque.com

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YouTube

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| Order Code | Model | ISO | Calibrated Range | | | Drive | kg | Accuracy |
|------------|----------|-------------|------------------|---------------|------------|-------------------------------|------|----------|
| | | | | Imperial | | | | |
| 058100 | MTP 10 | 0-10 cN.m | 0.5 cN.m | 0-14 ozfin | 1 ozfin | $\frac{1}{8}$ | 0.98 | +/- 2% |
| 058110 | MTS 35 | 7-35 cN.m | 0.5 cN.m | 10-50 ozfin | 0.5 ozfin | $\frac{1}{4}$ + $\frac{1}{4}$ | 3.20 | +/- 2% |
| 058120 | MTS 130 | 26-130 cN.m | 2 cN.m | 36-180 ozfin | 2 ozfin | $\frac{1}{2}$ + $\frac{1}{4}$ | 3.20 | +/- 2% |
| 058130 | MTS 400 | 0.8-4 N.m | 0.05 N.m | 7-36 lbf-in | 0.5 lbf-in | $\frac{1}{2}$ + $\frac{1}{4}$ | 3.20 | +/- 2% |
| 058140 | MTS 1200 | 2.4-12 N.m | 0.2 N.m | 24-120 lbf-in | 2 lbf-in | $\frac{1}{4}$ + $\frac{3}{8}$ | 3.20 | +/- 2% |
| 058150 | MTS 2500 | 5-25 N.m | 0.5 N.m | 44-220 lbf-in | 5 lbf-in | $\frac{1}{4}$ + $\frac{3}{8}$ | 3.20 | +/- 2% |

DREMOTEST E Torque Calibration Analysers

Torque range from 0.2 to 3000 N.m

Robust, accurate Torque Calibration Analysers that are ideal for Hand Torque Tools covering a wide torque range, in a Workshop or Repair environment.

Accurate measurement. Easy to use, robust Torque Calibration Analysers providing +/-1% accuracy

Data management capability. A RS 232 output allows data to be exported to Hyper Terminal Software

Full set of Accessories. Drive adaptor, mains lead, connectors and Certificate of Calibration all included

Long Service Life. Simple lightweight design, backed up by a full Aftersales and Recalibration Service

Versatility. Five models available covering a range from 0.2 to 3000 N.m

Value for money. A comprehensive package, at a competitive price compared to traditional Mechanical Analysers

DREMOTEST E 55



DREMOTEST E 12



| Order Code | Model | Calibrated Range | | | | Drive | kg | Accuracy |
|------------|------------------|------------------|------------|-----------------|--------------|--|------|----------|
| | | ISO | Resolution | Imperial | Resolution | | | |
| 2288311 | DREMOTEST E 12 | 0.2-12 N.m | 0.001 N.m | 1.8-106 lbf.in | 0.001 lbf.in | $\frac{1}{16} + \frac{1}{4} + \frac{3}{8}$ | 2.60 | +/- 1% |
| 1947699 | DREMOTEST E 55 | 0.9-55 N.m | 0.01 N.m | 0.7-40 lbf.ft | 0.01 lbf.ft | $\frac{1}{4} + \frac{3}{8}$ | 2.60 | +/- 1% |
| 1856111 | DREMOTEST E 320 | 9-320 N.m | 0.1 N.m | 7-236 lbf.ft | 0.1 lbf.ft | $\frac{3}{8} + \frac{1}{2}$ | 2.60 | +/- 1% |
| 1947702 | DREMOTEST E 1100 | 90-1100 N.m | 1 N.m | 66-811 lbf.ft | 1 lbf.ft | $\frac{1}{2} + \frac{3}{4}$ | 10.0 | +/- 1% |
| 2529858 | DREMOTEST E 3000 | 500-3000 N.m | 1 N.m | 369-2214 lbf.ft | 144 lbf.ft | 1 | 26.0 | +/- 1% |

ISO 1500/90° & ISO-A

Torque Loading Systems

Versatile Torque Loading Systems that enable precise Torque calibration and testing, up to a surprisingly high level of torque, to be undertaken on your own premises. Accurate and easy to use, the possibility of human error or variation is eliminated.

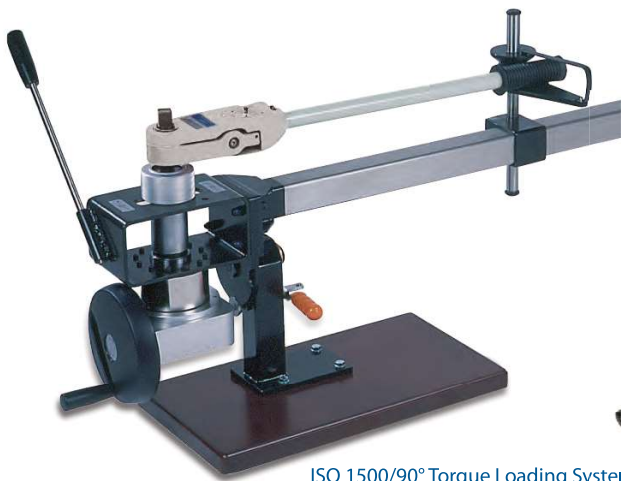
Accurate. These Torque Loading Systems enable the accurate testing of all Torque Wrenches within their given range, whilst removing the possibility of human error or variation

Adaptable. An easy adjustment system to suit the individual Torque Wrench being calibrated

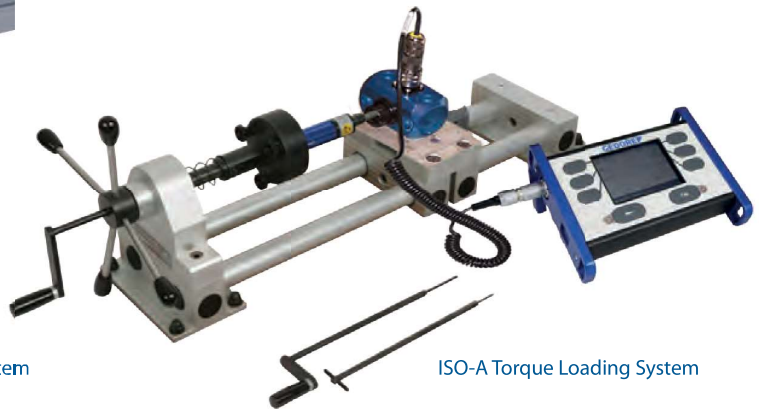
Easy to use. 1200:1 Gearbox requires low operator effort, therefore torques as high as 1500 N.m can be achieved with ease

Improved in-house capability. Torque calibration and testing can be carried out on your own premises, eliminating the need to use external suppliers

ISO accreditation. Meets the International Standard ISO 6789 for the calibration of Torque Wrenches



ISO 1500/90° Torque Loading System



ISO-A Torque Loading System

For more information: Tool Selector; gedore-torque.com/tool-selector Telephone; +44 (0) 1483 894 476
Videos; www.youtube.com/gedore-torque Email; salesandrepairs@gedore-torque.com

Want to know how to use this tool?



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| Order Code | Model | Maximum Capacity | | Maximum Tool Length | |
|------------|---|------------------|-------------|---------------------|------|
| | | ISO | Imperial | k mm | kg |
| 014300 | ISO 1500/90° Torque Loading System | 1500 N.m | 1107 lbf.ft | 1350 | 32.0 |
| 014400 | Torque Master ISO-A Torque Loading System | 30 N.m | 22 lbf.ft | 300 | 8.75 |
| D18204 | E-tp Mounting Kit | 30 N.m | 22 lbf.ft | 300 | 1.60 |
| D18205 | CAPTURE Sensor & CAPTURE Hub ISO-A Mount | 30 N.m | 22 lbf.ft | 300 | 3.40 |
| 038771 | CAPTURE Sensor ISO 1500/90° Adaptor | 1500 N.m | 1107 lbf.ft | – | 2.60 |