

# **TORQUE TOOLS**



# The Power of Precision

formerly TORQUELEADER

EDITION 1

# The Power of Precision

Welcome to our 2016 catalogue. It contains information about the world's most advanced range of torque tools, produced in the UK by Gedore Torque (formerly Torqueleader).

For the past 75 years, the world's most sophisticated engineering, manufacturing and technology businesses have depended upon our products to build, maintain and repair some of the most amazing things on earth. We are confident that this catalogue will maintain that tradition.

#### When accuracy and consistency really matter

Engineering and manufacturing businesses depend upon the accurate measurement and application of torque to nuts, bolts and threaded fasteners. Adherence to the correct torque specification ensures process conformity, product quality, product safety and reliability.

That's why when accuracy and consistency really matter, our customers choose Gedore Torque products. You'll find our tools in industries such as aerospace, aviation, automotive and telecommunications, being used in environments including production, quality control, research & development and servicing.

#### A commitment to excellence, innovation and customer service

With distributors and customers in more than 51 countries, we are a global business. And as part of the Gedore Group, the world's largest group of tool specialists, our new name reflects the world-class standards to which we operate.

While our name has changed, our commitment to excellence, innovation and customer service remains the same. From our base in the UK, Gedore Torque will continue to design and manufacture a comprehensive range of industry-leading torque tools, delivering the accuracy and reliability our customers need, as well as first-class advice, service and technical support.

If we can help you to benefit from the power of precision, please get in touch.

Front cover 'An extraordinary tale of engineering imagination.'\* When Airbus built the A380, the world's largest passenger aircraft, they chose Gedore Torque tools to ensure absolute precision. \* The Guardian newspaper

### 

BT Tower 'A unique feat of engineering'\* When the BT Tower opened in 1966, it was the tallest building in London. Since then, telecommunications has been one of Gedore Torque's most important industry sectors. \* Gavin Patterson, BT CEO



#### A place for precision

For the past 75 years, all our torque tools have been designed and manufactured at our United Kingdom site, located 35 miles outside London.

Gedore Torque has built upon our proud engineering traditions and highly-skilled workforce with a multi-million pound investment in the most up-to-date manufacturing technology. Every tool is still assembled by hand, ready to provide years of accurate, reliable service.

We are within easy reach of our customers and distributors, close to the UK's motorway network, London airports and the Channel tunnel and ports. London Heathrow Airport is 30 miles away, London Gatwick Airport 35 miles and Dover 95 miles.











#### Everything in one location

Our 28,000 square feet site has been at the forefront of UK torque tool design and manufacture since 1937. Today, the same location is home to the world's most advanced and fully-integrated torque tool manufacturing facility.

Every aspect of our business is based here: Research & Development, Procurement, Manufacture, Assembly and Despatch. Our UKAS Calibration Laboratory ensures absolute accuracy, while our sales, marketing and customer service teams ensure that customers are always at the heart of our business.

Most importantly, the expertise and skills of our 70-strong team are always focused on the needs of our customers for increasingly efficient, innovative and reliable ways of measuring, applying and calibrating torque.

Everything we do conforms to exacting standards, both internal and external, including ISO and UKAS accreditations for our on site calibration laboratory. The quality of our people, process and facilities is your guarantee that our tools will deliver unsurpassed accuracy, quality and durability.

# Contents

Welcome to the world's most advanced and comprehensive range of Torque Tools, applications and services.

We are confident that these can provide the accuracy and reliability you need, for just about any torque application, in most industries.

If you require further assistance or information, please contact us, using the details below.

**Power and precision** At 200 mph, absolute accuracy and total precision really matter. We have supplied tools to every F1 racing team for more than 20 years.

# Torque Measuring Tools

8-15

Torque Screwdrivers and Wrenches that measure the level of torque that has been applied to a nut, bolt or threaded fastening. Used in Research & Development, Quality Auditing and Production Improvement.

# Torque Application Tools 16-55

Torque Screwdrivers and Wrenches that apply a set torque to a fastener. Torque Application Tools will slip, break or click to signal when the set torque is reached. Used for Production Processes, Service and Repair.

# Torque Calibration Tools 56-67

Tools that are used for the testing, calibration and recalibration of Torque Tools, to ensure accurate and consistent operation. Used in production lines for Quality Control and in Calibration Laboratories.

# Torque Special Projects 68-71

Custom Tools and Tool Kits for the most exacting and specialised torque applications. Can also be supplied as Private Label, to meet user branding specifications.

# Torque Accessories



80-87

A wide range of Accessories, all compatible with our Torque Screwdrivers and Accessories. Custom accessories to meet specific application or operational needs.

# Technical Support

Unparalleled technical information, services and support. A worldwide network of factory-trained distributors. On-site Calibration Laboratory. Quality Assurance and Standards. Torque information.

# For more information:

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

# Torque Measuring Tools

### Introduction

Torque Measuring Tools are used in many manufacturing and engineering businesses to check, determine or apply the correct level of torque, using a dial or digital readout. They perform a crucial role in Audit, Inspection, Production, Quality Control, Research & Development and Servicing environments.

Engineering and manufacturing depend upon the accurate application of torque to nuts, bolts and fasteners. In fact, torque is essential for process conformity, product safety and total reliability: service problems and product failure can often be the result of insufficient or excessive torque. Gedore Torque Measuring Tools minimise these problems by ensuring that the correct torque settings can be applied and checked, with absolute and repeatable accuracy.



#### Types of Measuring Tool

Torque Measuring Tools are available as Torque Screwdrivers or Torque Wrenches. They are fitted with a dial, or digital readout, which enables Torque to be measured as it is applied (Track mode) or when the maximum torque value has been reached (Peak mode).

#### The application of Torque Measuring Tools

Torque Measuring Tools are used in many engineering, manufacturing and service environments, where adherence to the correct level of torque is essential for process conformity.

In Research & Development, Torque Measuring Tools can be used to determine what level of torque should be applied to a nut or bolt.

They can also be used in Auditing, Inspection and Quality Control in a manufacturing environment, to ensure that the correct level of torque has been applied.

Torque Measuring Tools can also be used to give absolute and repeatable accuracy in Production and Servicing, where operators may be required to tighten fasteners to various torque values.

#### Judity Auditing Tests

There are three main ways in which Torque Measuring Tools can be used for Quality Audit purposes.

**Measurement.** This is used to verify the torque value of a previously tightened fastener. A clear mark is made on the surface of the nut, bolt or screw and continued onto the surface being clamped. This acts as a reference point. The fastener must then be untightened and then retightened until the marks are again in line. The torque value can then be read from the torque tool display.

**Just Move Test.** This is used to determine the torque setting of a previously tightened fastener. Using a torque measuring tool, a tightening torque is applied to the fastener until movement is just seen or felt. This torque is deemed to be a good indication of the original torque applied to the fastener.

**Break Loose Test.** This is used for checking the torque applied to a previously tightened fastener. Torque is applied in the direction that loosens the fastener and the torque is recorded at the point the fastener breaks loose. This value is an indication of the torque at which the fastener was originally tightened and is typically 20-30% lower than the tightening torque.

TT 100 FH

# TT Dial Measuring Torque Screwdrivers Torque range from 0.1 to 5 N.m

The Gedore Torque range of Dial Measuring Torque Screwdrivers is designed for torque evaluation and torque verification, in order to ensure process conformity, product safety and absolute reliability. These low

cost and versatile tools provide accuracy, reliability and economy in a wide range of Maintenance and Repair, Quality Control, R & D and Assembly operations in any engineering or manufacturing environment.







T-Bar is not included with the TT Screwdriver Range

#### Versatile Torque Measuring Screwdrivers for any manufacturing environment

- Absolute accuracy. Unique torsion bar mechanism to ensure total precision
- Dual scale. Dial provides efficient measurement in Metric and Imperial torque units in both directions, delivering flexibility and minimising tool investment
- Ease of use. Lightweight materials. Tools can be used by operators at any skill level

Long tool life. High quality, robust construction: stainless steel shaft, attractive coloured aluminium handle and sturdy dial  Measure Process Conformity. Unique memory function enables these tools to carry out the Just Move and Break Loose Quality Auditing Tests

- No risk of tool damage. Overload
   Protection System with unique positive contact mechanism
- Operational versatility. Torque can be measured as it is applied (Track mode) or when the maximum torque value has been recorded (Peak mode)

#### Additional features

Calibration Service enables tools to be kept accurate and up to date. See page 82

Two year warranty provides additional peace of mind

to use this too

YOTI TI

Range of accessories provides versatility. **See pages 72-79** 

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

| Order  |           | <            | Calibra     | ted Range     |             | >                            |        |       |          | ISO 6789 |     |
|--------|-----------|--------------|-------------|---------------|-------------|------------------------------|--------|-------|----------|----------|-----|
| Code   | Model     | ISO          | ليتتبلينينا | Imperial      | ليتتبلينينا | Drive                        | k mm x | J g J | Accuracy | Class    | EPA |
| 017400 | TT 50 FH  | 10-50 cN.m   | 2 cN.m      | 14-70 ozf·in  | 2 ozf·in    | $\left<\frac{1}{4}\right>$   | 178    | 190   | +/- 6%   | 1D       | 1   |
| 017500 | TT 100 FH | 20-100 cN.m  | 4 cN.m      | 28-140 ozf•in | 4 ozf∙in    | $\left< \frac{1}{4} \right>$ | 178    | 190   | +/- 6%   | 1D       | 1   |
| 017600 | TT 250 FH | 50-250 cN.m  | 10 cN.m     | 4-20 lbf·in   | 0.5 lbf·in  | $\langle \gamma_4 \rangle$   | 250    | 465   | +/- 6%   | 1D       | 1   |
| 017700 | TT 500 FH | 100-500 cN.m | 20 cN.m     | 8-40 lbf·in   | 1 lbf·in    | $\left< \frac{1}{4} \right>$ | 250    | 465   | +/- 6%   | 1D       | 1   |

# **Dial Measuring Torque Wrenches** Torque range from 0.8 to 2000 N.m

BDS 80 E

#### INDUSTRY SECTORS









The Gedore Torque range of Dial Measuring Torque Wrenches is designed to verify or monitor torque, in order to ensure process conformity, product safety and absolute reliability. The slave pointer on the dial captures the finishing torque applied to a fastener with a memory pointer. These low cost, durable and versatile tools can be used for Maintenance, Repair, Quality Control and Assembly in any engineering or manufacturing environment.



ADS 25 S

Durable storage case for ADS and BDS models

#### ADS, BDS, CDS, DDS & EDS Signal versions available. All ADS models are **EPA compliant**

#### Robust and versatile tools Dial Measuring Torque Wrenches

**Dual scale.** Dial provides effective measurement in Metric and Imperial torque units in both directions, delivering flexibility and minimising tool investment

**Ease of use.** Lightweight materials. Tools can be used by operators at any skill level

Long tool life. High quality construction and robust design with a two year warranty No risk of tool damage. Overload Protection System. Recessed dial minimises damage to the dial display

Versatile usage. Use for Maintenance, Repair, Assembly and Quality Control

Wide range of applications. Tightening and untightening measurement is possible, with double-ended ratchet as standard (except EDS versions)

#### Additional features

- Calibration Service enables tools to be kept accurate and up to date. See page 82
- Special extension spanners. See page 79

Optional audio visual signal system. Clear indication is given when the target torque has been reached

#### 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



| Order<br>Code<br>010100<br>010108 | Model<br>ADS 4 | ISO          | ليتتبلينينا |                 |             |                  |        |      |          | ISO 6789 |        |      |
|-----------------------------------|----------------|--------------|-------------|-----------------|-------------|------------------|--------|------|----------|----------|--------|------|
|                                   | ADS 4          |              |             | Imperial        | ليتتبلينينا | Drive            | k mm > | kg   | Accuracy | Class    | Signal | (PA) |
| 010108                            |                | 0.8-4.0 N.m  | 0.1 N.m     | 7-35 lbf·in     | 1 lbf·in    | 1/4"             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
|                                   | ADS 4 S        | 0.8-4.0 N.m  | 0.1 N.m     | 7-35 lbf·in     | 1 lbf·in    | 1/4"             | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010120                            | ADS 8          | 1.6-8.0 N.m  | 0.25 N.m    | 14-75 lbf·in    | 1 lbf·in    | 1/4"             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
| 010128                            | ADS 8 S        | 1.6-8.0 N.m  | 0.25 N.m    | 14-75 lbf·in    | 1 lbf·in    | 1/4"             | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010140                            | ADS 12 D       | 2.4-12 N.m   | 0.5 N.m     | 24-120 lbf·in   | 2 lbf·in    | 1/4"             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
| 010148                            | ADS 12 DS      | 2.4-12 N.m   | 0.5 N.m     | 24-120 lbf·in   | 2 lbf·in    | 1/4"             | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010160                            | ADS 12 A       | 2.4-12 N.m   | 0.5 N.m     | 24-120 lbf·in   | 2 lbf·in    | 3/8″             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
| 010168                            | ADS 12 AS      | 2.4-12 N.m   | 0.5 N.m     | 24-120 lbf·in   | 2 lbf·in    | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010180                            | ADS 25         | 5-25 N.m     | 1 N.m       | 48-240 lbf·in   | 10 lbf·in   | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
| 010188                            | ADS 25 S       | 5-25 N.m     | 1 N.m       | 48-240 lbf·in   | 10 lbf·in   | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010200                            | ADS 25 F       | 5-25 N.m     | 1 N.m       | 4-20 lbf·ft     | 0.5 lbf·ft  | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
| 010208                            | ADS 25 FS      | 5-25 N.m     | 1 N.m       | 4-20 lbf·ft     | 0.5 lbf·ft  | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010220                            | ADS 40         | 8-40 N.m     | 1 N.m       | 72-360 lbf·in   | 10 lbf·in   | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
| 010228                            | ADS 40 S       | 8-40 N.m     | 1 N.m       | 72-360 lbf·in   | 10 lbf·in   | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010240                            | ADS 40 F       | 8-40 N.m     | 1 N.m       | 6-30 lbf·ft     | 1 lbf·ft    | 3/8"             | 244    | 0.52 | +/- 3%   | 1B       | X      | 1    |
| 010248                            | ADS 40 FS      | 8-40 N.m     | 1 N.m       | 6-30 lbf·ft     | 1 lbf·ft    | <sup>3</sup> /8″ | 244    | 0.52 | +/- 3%   | 1B       | 1      | 1    |
| 010300                            | BDS 80 A       | 16-80 N.m    | 2 N.m       | 12-60 lbf·ft    | 1 lbf·ft    | 3/8"             | 435    | 1.35 | +/- 3%   | 1B       | X      | X    |
| 010380                            | BDS 80 AS      | 16-80 N.m    | 2 N.m       | 12-60 lbf·ft    | 1 lbf·ft    | 3/8"             | 440    | 1.47 | +/- 3%   | 1B       | 1      | X    |
| 010320                            | BDS 80 E       | 16-80 N.m    | 2 N.m       | 12-60 lbf·ft    | 1 lbf·ft    | 1/2"             | 435    | 1.36 | +/- 3%   | 1B       | X      | X    |
| 010400                            | BDS 80 ES      | 16-80 N.m    | 2 N.m       | 12-60 lbf·ft    | 1 lbf·ft    | 1/2"             | 440    | 1.49 | +/- 3%   | 1B       | 1      | X    |
| 010410                            | BDS 100 EF     | 20-100 N.m   | 2 N.m       | 14-70 lbf·ft    | 2 lbf·ft    | 1/2"             | 515    | 1.41 | +/- 3%   | 1B       | X      | X    |
| 010415                            | BDS 100 E      | 20-100 N.m   | 2 N.m       | 168-840 lbf·in  | 24 lbf·in   | 1/2"             | 515    | 1.41 | +/- 3%   | 1B       | X      | X    |
| 010340                            | BDS 160        | 32-160 N.m   | 2.5 N.m     | 24-120 lbf·ft   | 2 lbf·ft    | 1/2″             | 515    | 1.41 | +/- 3%   | 1B       | X      | X    |
| 010420                            | BDS 160 S      | 32-160 N.m   | 2.5 N.m     | 24-120 lbf·ft   | 2 lbf·ft    | 1/2"             | 520    | 1.54 | +/- 3%   | 1B       | 1      | X    |
| 010360                            | BDS 200        | 40-200 N.m   | 5 N.m       | 30-160 lbf·ft   | 5 lbf·ft    | 1/2"             | 515    | 1.41 | +/- 3%   | 1B       | X      | X    |
| 010440                            | BDS 200 S      | 40-200 N.m   | 5 N.m       | 30-160 lbf·ft   | 5 lbf·ft    | 1/2"             | 520    | 1.54 | +/- 3%   | 1B       | 1      | X    |
| 010520                            | CDS 400 S      | 80-400 N.m   | 10 N.m      | 60-300 lbf·ft   | 10 lbf·ft   | 3/4"             | 710    | 3.20 | +/- 3%   | 1B       | 1      | X    |
| 010620                            | DDS 800 S      | 160-800 N.m  | 20 N.m      | 120-600 lbf·ft  | 20 lbf·ft   | 3/4"             | 1000   | 4.90 | +/- 3%   | 1B       | 1      | X    |
| 010700                            | EDS 1400 S     | 280-1400 N.m | 25 N.m      | 200-1000 lbf·ft | 25 lbf·ft   | 1″               | 2040   | 16.7 | +/- 3%   | 1B       | 1      | X    |
| 010720                            | EDS 2000 S     | 400-2000 N.m | 50 N.m      | 300-1500 lbf·ft | 50 lbf·ft   | 1                | 2040   | 16.7 | +/- 3%   | 1B       | 1      | X    |

# Diaita

# **Torcotronic Digital Torque Wrench with Angle** Torque range from 10 to 350 N.m

Torcotronic Digital Torque Wrenches provide highly accurate and controlled bi-directional tightening, suitable for Production, Quality Auditing, Research & Development, and Maintenance and Repair applications. These microprocessor-controlled tools have built-in memory which stores data for download to analysis software. A comprehensive range of accessories ensures that these robust, versatile precision assembly tools provide accuracy across a wide range of applications.

#### INDUSTRY SECTORS





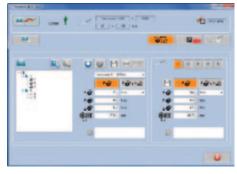


#### Robust, versatile tightening - plus data collection and auditing capability

- Accuracy. Exceptionally high levels of accuracy of +/-1% of reading between 10% and 100% of full scale
- Bi-directional tightening. Supplied with reversible ratchet as standard
- Control. High levels of accuracy give confidence that the tightening process is under control, hence also controlling rework and warranty costs with the added benefit of five programmable preset values
- Data collection. The built-in memory can store 2,000 data points ready for download to analysis software. This also makes the tools faster and easier to use

Long tool life. High quality construction and robust design

- Process traceability. Historic data storage and management features of easy to use PC software, available in 11 languages
- Versatility. Tools integrate with 9x12 and 14x18 wrench fittings. Torgue and angle capability ensures suitability for a broad range of applications across Production, Quality Auditing, Research & Development, and Maintenance and Repair



Data Analysis

#### Torcotronic 120 with Angle

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



| Order  |       | Calibrated | d Range ———   |            |           | ISO 6789 |      |          |       |
|--------|-------|------------|---------------|------------|-----------|----------|------|----------|-------|
| Code   | Model | ISO        | Imperial      | Drive      | Adaptors  | k mm 👌   | kg L | Accuracy | Class |
| 021640 | 120   | 10-120 N.m | 7-88 lbf·ft   | 1/2        | 9x<br>12  | 565      | 1.01 | +/- 1%   | 1C    |
| 021650 | 350   | 70-350 N.m | 51-258 lbf·ft | <u>1/2</u> | 14×<br>18 | 701      | 1.18 | +/- 1%   | 1C    |

# Torque Application Tools

#### Introduction

Gedore Torque offers the world's most comprehensive range of Torque Application Tools.

Torque Application Tools are used to apply a set torque to a fastener. When used, Torque Applying Tools will slip, break or click to signal to the operator when the set torque is reached.

Torque Application Tools are available as both screwdrivers and wrenches, with a wide torque range, to suit all application requirements. Choose from Preset Tools, that enable the consistent application of the same level of torque, or Calibrated Scale Tools, that enable a range of different torque settings to be applied.

Screwdrivers are available in a choice of aluminium, with its lighter weight and durability, or plastic, with an ergonomic hand grip for easier operator use.

All Torque Application Tools are guaranteed to deliver the correct torque every time, with absolute accuracy.



#### Types of Torque Application Tools

**Preset Tools.** Preset tools are ideal in environments that require the same torque to be applied to a fastener time after time. They can be used by operators of any skill level, as the level of torque applied by the tool is pre-set using a Calibration Analyser.

**Calibrated Scale Tools.** Calibrated Scale Tools are ideal for use in situations where a range of different torque settings need to be applied. These types of tools have a visible scale that allows the user to adjust them to their desired torque setting.

## The principles underlying Torque Tool Mechanisms

#### Slipping Tools... Overtightening Impossible

When the preset torque value is reached, (as indicated by the dotted line in the graph) a mechanism in these tools cause the application of torque to cease and the tools slip free.



**Breaking Tools... Overtightening Unlikely** When the preset torque value is reached, (as indicated by the dotted line in the graph) these tools break at a specific point along their length. The movement is approximately 20°.



**Clicking Tools... Overtightening Possible** When the preset torque value is reached, (as indicated by the dotted line in the graph) the operator will hear a click and feel an impulse.



# Aluminium TLS Preset Torque Screwdrivers Torque range from 0.02 to 13.6 N.m

\_\_\_\_\_

A range of compact aluminium preset torque screwdrivers, each of which delivers the correct torque accurately and repeatedly.

The models in this range include: TLS 0022, Minor, Standard & TLS 1360. Technical details of all models are given on pages 18-21.

Slipping Mechanism

All tools are also available with One Way (O/W) clockwise torque and anti clockwise torque.

These durable, versatile and lightweight tools can be used for Assembly, Maintenance and Servicing in any engineering or manufacturing environment.

#### INDUSTRY SECTORS



Products



|        | ALC: NOT THE OWNER OF THE OWNER OWNER OF THE OWNER OWNE |             |               |  |                      |       | Scient Street |          | 1.1    |
|--------|---|-------------|---------------|--|----------------------|-------|---------------|----------|--------|
| Order  |   | <b>←</b> Ra | ange —        | >  |                      |       |               | ISO 6789 |        |
| Code   | Model   | ISO         | Imperial      | Drive  | <b>k</b> mm <b>x</b> | J g J | Repeatability | Class    | Colour |
| 015000 | TLS 0022 Micro FH   | 4-22 cN.m   | 5.7-32 ozf·in |  | 76                   | 050   | +/- 6%        | 2F       | Red    |
| 015080 | TLS 0022 FH   | 2-22 cN.m   | 2.8-32 ozf.in |  | 104                  | 072   | +/- 6%        | 2F       | Gold   |
| 015085 | TLS 0022 FH O/W   | 4-22 cN.m   | 5.7-32 ozf·in | $\left< \frac{1}{4} \right>$                   | 116                  | 085   | +/- 6%        | 2F       | Gold   |
| 015200 | Minor FH  | 14-135 cN.m | 1.2-12 lbf·in | $\left< \frac{\gamma_{4}}{\gamma_{4}} \right>$ | 111                  | 210   | +/- 6%        | 2F       | Blue   |
| 015205 | Minor FH O/W  | 14-135 cN.m | 1.2-12 lbf·in | $\left< \frac{1}{4} \right>$                   | 125                  | 210   | +/- 6%        | 2F       | Blue   |
| 015220 | Minor FH  | 14-135 cN.m | 1.2-12 lbf·in |  | 111                  | 210   | +/- 6%        | 2F       | Green  |
| 015225 | Minor FH O/W  | 14-135 cN.m | 1.2-12 lbf·in |  | 125                  | 210   | +/- 6%        | 2F       | Green  |
| 015240 | Minor FH  | 14-135 cN.m | 1.2-12 lbf·in | < <u>1/4</u> >                                 | 111                  | 210   | +/- 6%        | 2F       | Red    |
| 015245 | Minor FH O/W  | 14-135 cN.m | 1.2-12 lbf·in |  | 125                  | 210   | +/- 6%        | 2F       | Red    |
| 015260 | Minor FH  | 14-135 cN.m | 1.2-12 lbf·in |  | 111                  | 210   | +/- 6%        | 2F       | Gold   |
| 015265 | Minor FH O/W  | 14-135 cN.m | 1.2-12 lbf·in |  | 125                  | 210   | +/- 6%        | 2F       | Gold   |

#### Lightweight, high quality TLS Preset Torque Screwdriver range

Absolute accuracy and consistency. Accurate process control is ensured by eliminating under and over tightening due to the proven slipping mechanism

Ease of use. Tools can be used by operators at any skill level, due to unique slipping mechanism

Improved production quality. Accurate torque application reduces the likelihood of warranty and rework Increased production efficiency. Lightweight aluminium construction and smooth reset action of the tools increase production efficiency by reducing operator fatigue

**Long tool life.** High quality, robust construction

 Operational versatility. These versatile tools are ideal for a wide range of applications, with wide torque range and one way slipping action option





See pages 18-21 for details

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

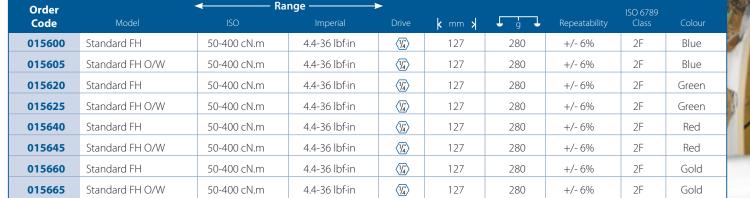




Standard F

Compact high-quality aluminium pre-set Torque Screwdrivers that deliver the correct torque accurately and consistently.

Standard FH



# **Aluminium TLS Preset Torque Screwdrivers** Torque range from 0.04 to 13.6 N.m

Compact high-quality aluminium pre-set Torque Screwdrivers that deliver the correct torque accurately and consistently, with T-Bars as standard to assist with higher torque.





/ant to know to use this to

h our vid

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

Range -Order J ģ **k** mm **x** Code l 22-120 lbf·in  $\left< \frac{1}{4} \right>$ 137 015890 TLS 1360 FH 2.5-13.6 N.m 325 +/- 6% 2F Blue TLS 1360 FH O/W 22-120 lbf·in  $\left< \frac{1}{4} \right>$ 137 015895 2.5-13.6 N.m 325 +/- 6% 2F Blue  $\left< \frac{1}{4} \right>$ 015860 TLS 1360 FH 2.5-13.6 N.m 22-120 lbf·in 137 325 +/- 6% 2F Green 015865 TLS 1360 FH O/W 2.5-13.6 N.m 22-120 lbf·in  $\left< \frac{1}{4} \right>$ 137 325 +/- 6% 2F Green 015870 TLS 1360 FH 2.5-13.6 N.m 22-120 lbf-in  $\left< \frac{1}{4} \right>$ 137 325 +/- 6% 2F Red  $\left< \frac{1}{4} \right>$ 2F 015945 TLS 1360 FH O/W 2.5-13.6 N.m 22-120 lbf-in 137 325 +/- 6% Red  $\left< \frac{1}{4} \right>$ 137 015920 TLS 1360 FH 2.5-13.6 N.m 22-120 lbf-in 325 +/- 6% 2F Black  $\left< \frac{1}{4} \right>$ TLS 1360 FH O/W 2.5-13.6 N.m 22-120 lbf·in 137 325 +/- 6% 015925 2F Black

# DD

# **Pro Preset Torque Screwdrivers** Torque range from 0.05 to 13.5 N.m

The Redefined Preset Torque Screwdriver range has been designed to complement our traditional accuracy, durability and quality with the benefits of a moulded plastic body and enhanced ergonomic design.

The models in this range include: ESD, Prime and Pro. Technical details of all models are given on pages 25-27. These durable, versatile and lightweight tools can be used for Assembly, Maintenance and Servicing in any engineering or manufacturing environment.

#### Slipping Mechanism Incorrect tightening is impossi



#### INDUSTRY SECTORS



#### The Redefined Preset Torque Screwdriver range

Absolute accuracy and consistency. Accurate process control is ensured by eliminating under and over tightening due to the proven slipping mechanism

- **Ease of use.** Tools can be used by operators at any skill level, due to unique slipping mechanism
- Improved production quality. Accurate torque application reduces the likelihood of warranty and rework

#### Increased production efficiency.

Moulded more ergonomic rubber handgrip is more suited to curtain production techniques, and smooth tool reset action increases production efficiency by reducing operator fatigue

Long tool life. High quality, robust construction. Many years of dependable service are provided by the robust design, especially if regularly calibrated **Operational versatility.** These versatile tools are ideal for a wide range of applications, with wide torque range and one way slipping action option

To allow for customisation and clear identification interchangeable coloured end caps are available in packs of four (Order Code: 065800)



#### Additional features

- Calibration stickers can be easily applied to the purpose designed nose
- The ¼" female hexagon Pro range proves versatile with a quick conversion to male square ¼" drive by using a convertor (Order Code: 029200)
- For more information on EPA compliant versions. **See page 25**
- Comprehensive range of Accessories, Bits and Blades. **See pages 76-77**
- Pro Screwdrivers can be customised to your exacting requirements.
   See page 71
- <sup>-</sup> Tool presetting service. See page 82

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





# ESD Preset Torque Screwdrivers

# Torque range from 0.05 to 13.5 N.m

# Preset Torque Application Screwdrivers for electronic component assembly

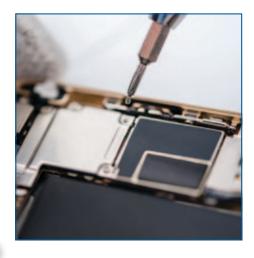
- The ESD Preset Torque Screwdriver range is ideal for safe electronic component assembly as these tools are EPA compliant
- Tools that complement our traditional accuracy, durability and quality with the benefits of a moulded plastic body and enhanced ergonomic design
- ESD 450 and 1350 models come with T-Bars as standard to assist with higher torque
- To allow for customisation and clear identification interchangeable coloured end caps are available in packs of four (Order Code: 065800)
- Comprehensive range of Accessories, Bits and Blades. **See pages 76-77**

Slipping Mechanism Incorrect tightening is impossible









Vant to know hov to use this tool?

| 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                       |

| Order  |             | Rang            | ge ————>          |                              |                      |     |               | ISO 6789 |       |
|--------|-------------|-----------------|-------------------|------------------------------|----------------------|-----|---------------|----------|-------|
| Code   | Model       | ISO             | Imperial          | Drive                        | <b>k</b> mm <b>x</b> | g J | Repeatability | Class    | T-Bar |
| 065400 | Pro 25 FH   | 0.05 - 0.25 N.m | 0.45 - 2.2 lbf.in | $\left< \frac{1}{4} \right>$ | 132                  | 210 | +/- 6%        | 2F       | ×     |
| 065500 | Pro 150 FH  | 0.2 - 1.5 N.m   | 1.8 - 13 lbf.in   | $\left< \frac{1}{4} \right>$ | 132                  | 210 | +/- 6%        | 2F       | ×     |
| 065600 | Pro 450 FH  | 0.5 - 4.5 N.m   | 4.5 - 40 lbf.in   | $\left< \frac{1}{4} \right>$ | 140                  | 230 | +/- 6%        | 2F       | 1     |
| 065700 | Pro 1350 FH | 2.5 - 13.5 N.m  | 22 - 120 lbf.in   | $\langle V_4 \rangle$        | 140                  | 230 | +/- 6%        | 2F       | 1     |
| 065405 | ESD 25 FH   | 0.05 - 0.25 N.m | 0.45 - 2.2 lbf.in | $\left< \frac{1}{4} \right>$ | 132                  | 210 | +/- 6%        | 2F       | ×     |
| 065505 | ESD 150 FH  | 0.2 - 1.5 N.m   | 1.8 - 13 lbf.in   | $\left< \frac{1}{4} \right>$ | 132                  | 210 | +/- 6%        | 2F       | ×     |
| 065605 | ESD 450 FH  | 0.5 - 4.5 N.m   | 4.5 - 40 lbf.in   |                              | 140                  | 230 | +/- 6%        | 2F       | 1     |
| 065705 | ESD 1350 FH | 2.5 - 13.5 N.m  | 22 - 120 lbf.in   | <1/4<br>1/4                  | 140                  | 230 | +/- 6%        | 2F       | 1     |

# **Prime Preset Torque Screwdrivers** Torque range from 0.2 to 4.5 N.m

These tools have been specifically designed to provide a low cost product that is suitable for light or occasional use, or one-off applications. Can be used up to 2,000 cycles between calibration or replacement. They have no certification and are not intended for regular or heavy use, where our Pro Preset range of preset screwdrivers should be selected.



# Low cost Preset Torque Application Screwdrivers, for one-off applications or light use

Prime Preset Torque Screwdrivers offer a low cost option for applications where a torque tool may not previously have been considered

They combine accuracy with the benefits of a moulded plastic body and ergonomic design, to remove the risk of under or over tightening. As well as the application of torque, they can also undo fasteners, as One Way (O/W) action is standard A comprehensive range of Accessories, Bits and Blades is available. **See pages 76-77** 





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 hov  | v |
|-------------------|---|
| to use this tool? |   |
| You Tube          |   |
| Watch our video   |   |

| Order  |              | Rang          | je —            |  |                         |       |               |
|--------|--------------|---------------|-----------------|--|-------------------------|-------|---------------|
| Code   | Model        | ISO           | Imperial        | Drive  | <b>k</b> mm <b>&gt;</b> | ↓ ġ ↓ | Repeatability |
| 065100 | Prime 150 FH | 0.2 - 1.5 N.m | 1.8 - 13 lbf.in | $\left< \frac{\gamma_{4}}{\gamma_{4}} \right>$ | 138                     | 198   | +/- 10%       |
| 065200 | Prime 450 FH | 0.5 - 4.5 N.m | 4.5 - 40 lbf.in | $\langle \overline{\mathcal{V}_4} \rangle$     | 138                     | 198   | +/- 10%       |

# **TLS Preset Clean Room Torque Screwdrivers** Torque range from 0.04 to 13.6 N.m Clean Room (CRS) Class 100 Compliant

Designed specifically for use in Clean Rooms, to protect precision products from contamination during assembly, utilising PTFE impregnated sealed anodised aluminium handles. External steel components are either high grade stainless steel or coated to inhibit corrosion thereby utilising suitable surface treatments and incorporating high performance seals in their design.

#### INDUSTRY SECTORS





#### Preset Torque Screwdrivers for Clean Rooms

- Increased operator comfort from the soft reset action of the tool
- Complete control of the tightening process is achieved. Both under and over tightening are eliminated by our unique slipping mechanism
- Suitable for use by operators of any skill level, as these tools will repeatedly deliver the set torque without the need for operator intervention
- CRS Torque Screwdrivers are preset type torque tools. They must be set to the required value by using a Torque Analyser. **See page 64 for details**
- Comprehensive range of Accessories, Bits and Blades. **See pages 76-77**

Slipping Mechanism Incorrect tightening is impossible



CRS 100-0022 FH

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



| Model           | ISO                              |   |   |   | ISO 6789  |   |  |   |  |  |
|-----------------|----------------------------------|---|---|---|---|---|--|---|--|--|
|                 |                                  | Imperial  | Drive   | k mm 👌  | J g J   | Repeatability   | Class  | Colour  |  |  |
| CRS 100-0022 FH | 2-22 cN.m                        | 6-32 ozf·in   | < <u>1/4</u> >  | 104   | 072   | +/- 6%  | 2F   | Grey  |  |  |
| CRS 100-0135 FH | 14-135 cN.m                      | 0.9-12 lbf·in   | < <u>1/4</u> >  | 111   | 210   | +/- 6%  | 2F   | Grey  |  |  |
| CRS 100-0406 FH | 50-400 cN.m                      | 4.4-36 lbf·in   | $\langle \eta_4^* \rangle$  | 127   | 280   | +/- 6%  | 2F   | Grey  |  |  |
| CRS 100-1360 FH | 2.5-13.6 N.m                     | 22-120 lbf·in   | $\langle \eta_4 \rangle$  | 137   | 325   | +/- 6%  | 2F   | Grey  |  |  |
|                 | RS 100-0135 FH<br>RS 100-0406 FH | CRS 100-0135 FH         14-135 cN.m           CRS 100-0406 FH         50-400 cN.m | CRS 100-0135 FH         14-135 cN.m         0.9-12 lbf.in           CRS 100-0406 FH         50-400 cN.m         4.4-36 lbf.in | CRS 100-0135 FH         14-135 cN.m         0.9-12 lbf-in         V/2           CRS 100-0406 FH         50-400 cN.m         4.4-36 lbf-in         V/2 | CRS 100-0135 FH         14-135 cN.m         0.9-12 lbf-in         111           CRS 100-0406 FH         50-400 cN.m         4.4-36 lbf-in         127 | CRS 100-0135 FH         14-135 cN.m         0.9-12 lbf-in         111         210           CRS 100-0406 FH         50-400 cN.m         4.4-36 lbf-in         127         280 | CRS 100-0135 FH       14-135 cN.m       0.9-12 lbf·in       Image: Comparison of the | CRS 100-0135 FH       14-135 cN.m       0.9-12 lbf·in       111       210       +/- 6%       2F         CRS 100-0406 FH       50-400 cN.m       4.4-36 lbf·in       127       280       +/- 6%       2F |  |  |



# **ESD Electric Torque Screwdrivers** Torque range from 0.05 to 4.40 N.m

ESD Electric Torque Screwdrivers are ideal for the accurate and consistent application of torque in high volume production environments. These tools are durable, efficient, effective and easy to use in any manufacturing business. Special features also make them suitable for the assembly of electronic and plastic products.



#### I N D U S T R Y S E C T O R S



# **ESD Electric Torque Screwdrivers** EF 120 & K 450 Series

# Electric Torque Screwdrivers, for accurate, effective and consistent torque application

Absolute accuracy and consistency.

**Ease of use.** The tools are easy to set up and require minimal operator training. The operator is able to work effectively and safely, as these tools are comfortable to use because of their ergonomic design. This can be further enhanced by pairing the driver with a tool weight balancer or torque reaction arm

**Electronic assembly.** Maximises the production yields of electronic assemblies as these tools protect the assembly from static shocks due to their ESD compliance

Improved production efficiency. Accurate torque application reduces the likelihood of rework and scrap by delivering controlled repeatable torque through features like 'slow start' mode that minimises cross threading

#### Additional features

Details of Accessories and Power Bits. See pages 72-79

Set and calibrate your Screwdriver with an ET-cal II or Capture Hub Compact Torque Calibration Analyser. **For more details see page 64** or visit **www.gedore-torque.com**   Long tool life and effective production.
 These tools maximise productivity by keeping downtime to a minimum, as they are constructed from durable robust materials and designed to last

Plastic assembly. Ensures the quality of plastic assembly tightening by combating joint relaxation through use of the 'doublehit' repeat torque mode

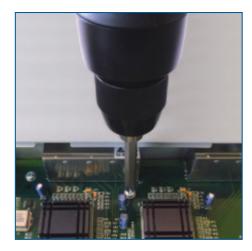
Please note: These tools must be used in conjunction with STC 30+ Controller (Order Code: 090000)



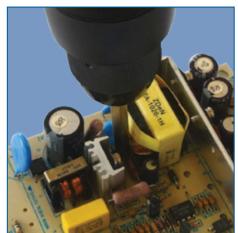
STC 30+ Controller

 Torque counter balancer are available on request.

Tamper proof cover to suit K series tools, order code: 090200. EF tools, order code: 090210







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



| Order  |                    | ← Range — RPM   |                 |     |     |             |       |     |    |               |
|--------|--------------------|-----------------|-----------------|-----|-----|-------------|-------|-----|----|---------------|
| Code   | Model              | ISO             | Imperial        | Hi  | Low | Drive       | J g J | EPA | CE | Repeatability |
| 090010 | EF 120             | 19.6-117.6 cN.m | 1.7-10.4 lbf·in | 700 | 460 | < <u>\]</u> | 311   | 1   | 1  | +/- 10%       |
| 090150 | K 450              | 50-440 cN.m     | 4.3-39 lbf·in   | 550 | 330 | < <u>\]</u> | 595   | 1   | 1  | +/- 10%       |
| 090000 | STC 30+ Controller | -               | -               | -   | -   | -           | 950   | -   | 1  | +/- 10%       |
|        |                    |                 |                 |     |     |             |       |     |    | İ             |

# Ergo Quickset Adjustable Torque Screwdrivers

# Torque range from 0.08 to 9 N.m

Ergo Quickset Adjustable Torque Screwdrivers are calibrated scale tools that can be used for the accurate and consistent application of torque in any manufacturing, engineering or servicing environment. They are EPA compliant, for safe electronic component assembly, and ergonomically designed for enhanced

operator comfort. Unique Slipping Technology ensures that the risk of over or under tightening is eliminated. Their adjustability and wide range of torque make them suitable for a broad range of applications.

QSN 600 FH

INDUSTRY SECTORS

> Maintenance & Repair









T-Bar is not included with the Ergo Quickset Screwdriver Range







#### Ergo Quickset Adjustable Torque Screwdrivers (ISO and Imperial Scales)

All models available with ¼" Female Hex (FH) Drive

- Accurate process control is ensured by eliminating under and over tightening due to the unique Slipping Technology
- Calibrated scale. A visible scale allows the user to adjust the tool to their desired torque setting, enabling a range of different torque settings to be applied
- Ease of use. Tools can be used with confidence by operators at any skill level, due to unique slipping mechanism
- Easy to set up. Fast and accurate to set, using the quick and clear to read micrometer style setting scale
- Electronics. Ideal for safe electronic component assembly as this tool is EPA compliant for use in Electrostatically Sensitive Areas

Slipping Mechanism Incorrect tightening is impossible



- Improved production quality. Accurate torque application reduces the likelihood of warranty and rework
- Increased production efficiency.
   Increased operator comfort and productivity, from the smooth reset action of the tool and the ergonomic design of the plastic handgrip
- Long tool life. High quality, robust construction. Many years of dependable service are provided by the robust design and hard-wearing materials, that include stainless steel and aluminium
- Operational versatility. These versatile tools are ideal for a wide range of applications, due to their adjustability and wide torque range





#### Additional features

- Optional Lock On T-Bar for larger models of screwdriver, provides extra leverage (Order Code: P29530)
- Can be supplied as part of a Service Repair Kit
- Tool can be kept accurate and up to date with our Calibration service.
   See page 82 for details

Want to know he

| Order  | ← Calibrated Range – → |               |             |                               |        |     |               |                   | Adjusting<br>Lock |     |
|--------|------------------------|---------------|-------------|-------------------------------|--------|-----|---------------|-------------------|-------------------|-----|
| Code   | Model                  | Range         | ليتتبلينينا | Drive                         | k mm 🖌 | ل أ | Repeatability | ISO 6789<br>Class | Colour            | EPA |
| 060700 | QSN 40 FH              | 8-40 cN.m     | 1 cN.m      | $\left< \frac{1}{4} \right>$  | 159    | 124 | +/- 6%        | 2D                | Blue              | 1   |
| 060740 | QSA 60 FH              | 12-60 ozf.in  | 1 ozf.in    | $\langle \frac{1}{4} \rangle$ | 159    | 124 | +/- 6%        | 2D                | Blue              | 1   |
| 060720 | QSA 4 FH               | 0.8-4 lbf.in  | 0.1 lbf.in  | $\langle \frac{1}{4} \rangle$ | 159    | 124 | +/- 6%        | 2D                | Blue              | 1   |
| 060100 | QSN 120 FH             | 20-120 cN.m   | 1 cN.m      | $\langle \frac{1}{4} \rangle$ | 183    | 230 | +/- 6%        | 2D                | Blue              | 1   |
| 060140 | QSA 160 FH             | 20-160 ozf.in | 1 ozf.in    | $\langle \frac{1}{4} \rangle$ | 183    | 230 | +/- 6%        | 2D                | Blue              | 1   |
| 060120 | QSA 12 FH              | 2-12 lbf.in   | 0.1 lbf.in  | $\langle \frac{1}{4} \rangle$ | 183    | 230 | +/- 6%        | 2D                | Blue              | 1   |
| 060300 | QSN 600 FH             | 1-6 N.m       | 0.1 N.m     | $\langle \frac{1}{4} \rangle$ | 196    | 335 | +/- 6%        | 2D                | Blue              | 1   |
| 060320 | QSA 50 FH              | 10-50 lbf.in  | 1 lbf.in    | $\langle 1/_4^{*} \rangle$    | 196    | 335 | +/- 6%        | 2D                | Blue              | 1   |
| 060500 | QSN 900 FH             | 4-9 N.m       | 0.1 N.m     | $\left< \frac{1}{4} \right>$  | 196    | 335 | +/- 6%        | 2D                | Blue              | 1   |
| 060520 | QSA 80 FH              | 30-80 lbf.in  | 1 lbf.in    | $\langle 1/_4 \rangle$        | 196    | 335 | +/- 6%        | 2D                | Blue              | 1   |

# **Quickset Adjustable Torque Screwdrivers** Torque range from 0.2 to 9 N.m

Quickset Adjustable Torque Screwdrivers are calibrated scale tools that can be used for the accurate and consistent application of torque in any manufacturing, engineering or servicing environment. Their adjustability and wide range of torque make them

suitable for a broad range of applications. These tools are durable, easy to use and the unique Slipping Technology means that the risk of over or under tightening is eliminated.

Quickset 6 FH

Slipping Mechanism

Incorrect tightening is impossible

T-Bar is not included with the Ergo Quickset

Screwdriver Range



#### INDUSTRY SECTORS

Maintenance & Repair









#### Quickset Adjustable Torque Screwdrivers (ISO and Imperial Scales)

All models are supplied with  $\ensuremath{{}_{1\!/\!4}}\xspace$  Female Hex (FH) Drive

- Accurate process control is ensured by eliminating under and over tightening due to the unique Slipping Technology
- Calibrated scale. A visible scale allows the user to adjust the tool to their desired torque setting, enabling a range of different torque settings to be applied
- **Ease of use.** Tools can be used with confidence by operators at any skill level, due to unique slipping mechanism
- Easy to set up. Fast and accurate to set, using the quick and clear to read micrometer style setting scale
- Improved production quality. Accurate torque application reduces the likelihood of warranty and rework

- Increased production efficiency. Increased operator comfort and productivity, from the smooth reset action of the tool and the ergonomic design of the plastic handgrip
- Long tool life. High quality, robust construction. Many years of dependable service are provided by the robust design and hard-wearing materials, that include stainless steel and aluminium
- **Operational versatility.** These versatile tools are ideal for a wide range of applications, due to their adjustability and wide torque range



#### Additional features

Accessories. See pages 72-79

- EPA compliant alternative available.
   See page 32
- Optional Lock On T-Bar for larger models of screwdriver, provides extra leverage when required. (Order Code: P29530)
- Tool can be kept accurate and up to date with our Calibration service. **See page 82 for details**

/ant to know ho to use this tool?

YOU Tube

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

| Order  |                          | ← Calibrated  | Range ——>   |                              |        |     |               | ISO 6789 |        |
|--------|--------------------------|---------------|-------------|------------------------------|--------|-----|---------------|----------|--------|
| Code   | Model                    | Range         | ليتتبلينينا | Drive                        | k mm 🖌 | ģ   | Repeatability | Class    | Colour |
| 016040 | Quickset Minor Metric FH | 20-120 cN.m   | 1 cN.m      | $\left< \frac{1}{4} \right>$ | 169    | 165 | +/- 6%        | 2D       | Blue   |
| 016060 | Quickset Minor Imp FH    | 20-120 ozf.in | 1 ozf.in    |                              | 169    | 165 | +/- 6%        | 2D       | Blue   |
| 016070 | Quickset Minor Ibf.in FH | 2-12 lbf.in   | 0.1 lbf.in  |                              | 169    | 165 | +/- 6%        | 2D       | Blue   |
| 016500 | Quickset 6 FH            | 1-6 N.m       | 0.1 N.m     |                              | 184    | 335 | +/- 6%        | 2D       | Blue   |
| 016600 | Quickset 50 FH           | 5-50 lbf.in   | 1 lbf.in    | < <u>\/</u> 4>               | 184    | 335 | +/- 6%        | 2D       | Blue   |
| 016700 | Quickset 9 FH            | 4-9 N.m       | 0.1 N.m     |                              | 184    | 335 | +/- 6%        | 2D       | Blue   |
| 016800 | Quickset 80 FH           | 30-80 lbf.in  | 1 lbf.in    | $\left< \frac{1}{4} \right>$ | 184    | 335 | +/- 6%        | 2D       | Blue   |

#### Dual Scale Quickset Screwdrivers Available:

| Order  | ← Calibrated Range → |             |             |               |             | ISO 6789          |        |     |               |    |        |
|--------|----------------------|-------------|-------------|---------------|-------------|-------------------|--------|-----|---------------|----|--------|
| Code   | Model                | ISO         | ليتتبلينينا | Imperial      | ليتتبلينينا | Drive             | k mm > | ġ.  | Repeatability |    | Colour |
| 016010 | Quickset Minor DS    | 20-120 cN.m | 1 cN.m      | 20-120 ozf.in | 1 ozf.in    | 1/4"              | 160    | 158 | +/- 6%        | 2D | Blue   |
| 016150 | Quickset 6 DS        | 1-6 N.m     | 0.1 N.m     | 5-50 lbf.in   | 1 lbf.in    | 1/ <sub>4</sub> " | 169    | 340 | +/- 6%        | 2D | Blue   |
|        |                      |             |             |               |             |                   |        |     |               |    |        |

# **N**

# **TSN & TSP Preset Slipping Torque Wrenches** Torque range from 1 to 125 N.m

High quality tools that have been designed and precision-engineered to meet the stringent demands of manufacturing businesses in most industries. The unique slipping mechanism eliminates under and over tightening in Production, hence ensuring absolute precision. EPA compliant.

TSN 55

TSP 10

INDUSTRY SECTORS

Manufacturing
Manufacturing
Automotive
Aerospace



Slipping Mechanism Incorrect tightening is impossible



# **Preset Slipping Torque Wrenches** Models: TSP5 & 10, TSN 25, 55 & 125

Absolute accuracy and consistency. Accurate process control is ensured by eliminating under and over tightening, regardless of operator's hand position, due to the unique Slipping Technology

Ease of use. Tools can be used with confidence by operators at any skill level, due to unique slipping mechanism

Electronics. Ideal for safe electronic component assembly as this tool is EPA compliant for use in Electrostatically Sensitive Areas. See table for details

#### Additional features

Accessories. See pages 72-79

EPA compliant alternative available. See table below

For details of Sockets. See page 75 or visit www.gedore-torque.com

For Switch Operated Signal Torque versions (Sw). See pages 42-43

Improved production efficiency.

Reduces the likelihood of warranty and rework by assuring process control through accurate and repeatable torque setting due to its adjusting system

Improved Process Control. Process control can be further enhanced by using the Switch Operated Signal Torque versions (Sw) to confirm the correct torgue has been applied to a particular fastener (see pages 42-43)

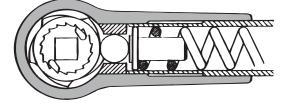
Long tool life. High quality, robust design and construction, further guaranteed by a two year warranty

Modifications are possible. Please contact us to discuss

TSN & TSP Wrenches are preset type torque tools. They must be set to the required value by using a Torque Analyser like the DREMOTEST E or Capture Calibration System. See page 64 for details

TSN 25 versions come with either 1/4" or 3/8" Drive

Working principle of the Gedore Torque Slipping Wrenches



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

| Order  |          | Ra         | nge ———      |       |                      |      |               | ISO 6789 |             |
|--------|----------|------------|--------------|-------|----------------------|------|---------------|----------|-------------|
| Code   | Model    | ISO        | Imperial     | Drive | <b>k</b> mm <b>x</b> | kg J | Repeatability | Class    | <b>E</b> AA |
| 056090 | TSP 5    | 1-5 N.m    | 10-45 lbf.in | 1/4   | 185                  | 0.19 | +/- 6%        | 2C       | 1           |
| 056100 | TSP 10   | 2-10 N.m   | 20-90 lbf.in | 1/4"  | 185                  | 0.19 | +/- 6%        | 2C       | 1           |
| 011017 | TSN 25 D | 5-25 N.m   | 4-18 lbf.ft  | 1/4"  | 216                  | 0.34 | +/- 4%        | 2C       | 1           |
| 011019 | TSN 25 A | 5-25 N.m   | 4-18 lbf.ft  | 3/8"  | 216                  | 0.34 | +/- 4%        | 2C       | 1           |
| 011035 | TSN 55   | 15-55 N.m  | 10-40 lbf.ft | 3/8"  | 324                  | 0.80 | +/- 4%        | 2C       | X           |
| 011055 | TSN 125  | 40-125 N.m | 30-90 lbf.ft | 1/2"  | 460                  | 1.36 | +/- 4%        | 2C       | X           |







#### ant to know how to use this too III III



# **TBN Preset Breaking Torque Wrenches** Torque range from 0.4 to 200 N.m

TBN Preset Breaking Torque Wrenches are robust production tools that reduce the chance of over-tightening, because of the unique Breaking Mechanism. They can be used for a wide range of applications, with a choice of compatible interchangeable end fittings. Their durable yet compact design makes them easy to use in restricted spaces in any manufacturing or maintenance environment.

TBN 135

TBN 2

**Breaking Mechanism** Incorrect tightening is unlikely

#### INDUSTRY SECTORS













# **TBN Preset Breaking Torque Wrenches** TBN 2, 10, 25, 65, 135 & 200



Improved accuracy, consistency and control. Accurate process control is ensured by reducing the risk of under and over tightening, due to unique Breaking Technology. This gives the operator more time to react once the target torque is reached

**Compact slimline design.** This maximises productivity in restricted space applications

Compatible End Fittings. A range of interchangeable end fittings is available, making this an extremely versatile tool. See pages 72-74 for details



- Ease of use. Tools can be used with confidence by operators at any skill level, due to the unique Breaking Technology
- Increased production efficiency.
   Increased operator comfort and productivity, from the ergonomic design, that includes lightweight materials and moulded plastic handgrip
- Long tool life. High quality, robust design and construction minimise tool replacement and downtime costs
- Rectangular fitting version also available. See table below



#### Additional features

TBN 2 and 10 Wrenches will be supplied with a Calibration Certificate when ordered with an attached end fitting and pre-set

For details on the TBN 2 & 10 SMA Connector Kit. **See page 72** 

For EPA options, **see table below** 

| 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                       |



| Order  |           | <b>∢</b> Ra | nge — 🔶 🕨     |             |                      |      |               | ISO 6789 |     |
|--------|-----------|-------------|---------------|-------------|----------------------|------|---------------|----------|-----|
| Code   | Model     | ISO         | Imperial      | Drive       | <b>k</b> mm <b>x</b> | kg J | Repeatability | Class    | EPA |
| 011100 | TBN 2     | 0.4-2 N.m   | 3.5-18 lbf.in | Captive Pin | 105                  | 0.11 | +/- 6%        | 2C       | 1   |
| 011110 | TBN 2 G   | 0.4-2 N.m   | 3.5-18 lbf.in | 9×<br>12    | 133                  | 0.13 | +/- 6%        | 2C       | 1   |
| 011200 | TBN 10    | 1-10 N.m    | 9-89 lbf.in   | Captive Pin | 105                  | 0.13 | +/- 6%        | 2C       | 1   |
| 011210 | TBN 10 G  | 1-10 N.m    | 9-89 lbf.in   | 9x<br>12    | 133                  | 0.15 | +/- 6%        | 2C       | 1   |
| 050000 | TBN 25    | 5-25 N.m    | 4-18 lbf.ft   | 16          | 265                  | 0.41 | +/- 4%        | 2C       | ×   |
| 050010 | TBN 25 G  | 5-25 N.m    | 4-18 lbf.ft   | 9x<br>12    | 265                  | 0.41 | +/- 4%        | 2C       | ×   |
| 050100 | TBN 65    | 10-65 N.m   | 7-48 lbf.ft   | 16          | 302                  | 0.75 | +/- 4%        | 2C       | ×   |
| 050110 | TBN 65 G  | 10-65 N.m   | 7-48 lbf.ft   | 9x<br>12    | 302                  | 0.75 | +/- 4%        | 2C       | ×   |
| 050200 | TBN 135   | 27-135 N.m  | 18-100 lbf.ft | 16          | 408                  | 1.03 | +/- 4%        | 2C       | ×   |
| 050210 | TBN 135 G | 27-135 N.m  | 18-100 lbf.ft | 9x<br>12    | 408                  | 1.03 | +/- 4%        | 2C       | ×   |
| 050300 | TBN 200   | 40-200 N.m  | 29-147 lbf.ft | 16          | 520                  | 1.40 | +/- 4%        | 2C       | ×   |
| 050310 | TBN 200 G | 40-200 N.m  | 29-147 lbf.ft | 14 ×<br>18  | 520                  | 1.40 | +/- 4%        | 2C       | ×   |

# **50V Insulated Preset Torque Wrenches** Torque range from 0.4 to 25 N.m

to provide absolute accuracy and user safety during electrical assembly and maintenance. Our unique breaking or

These tools have been precision-engineered slipping mechanism eliminates the risk of incorrect tightening and the compact tool design provides protection where there are electrically live components, up to 50V.

#### Essential service and maintenance - with no power

- maintenance and servicing, in order to ensure continuous safe operation. Often, this work has to be carried out to power, meaning that it is not possible to use hydraulic or impact wrenches
- Gedore Torque tools provide precision torque control, making it easier and often safer to tighten and loosen threaded fasteners to the high standards critical to the performance and safety of civilian and military helicopters.

#### INDUSTRY SECTORS

Manufacturing





# 50V insulated preset torque wrenches for electrical assembly

## Torque range from 0.4 to 25 N.m

#### Performing business critical work accurately, easily - and safely

Many businesses, organisations and industries depend upon emergency backup power systems to provide a continuous supply of electricity in the event of the loss of mainstream power supply. Often, this is provided by banks of batteries, that need to be checked, maintained and replaced on a regular basis – including while they are in operation and therefore electrically 'live'. Gedore Torque Insulated Torque Wrenches ensure that this essential work can be carried out accurately, easily and safely.

#### Absolute accuracy and consistency.

Accurate process control is ensured by eliminating under and over tightening, due to the unique Breaking or Slipping Technology installed in the wrench

Ease of use. The small and compact design combined with the totally insulated body is ideal for use in restricted space where there are electrically live components

#### **Improved production efficiency.** Eliminates the possibility of product failure due to shorting, arcing or other

electrical damage
User safety. Designed for use in low
voltage and other battery applications

voltage and other battery applications where protection up to 50 volts is required. Double layer nonconductive PVC insulation provides protection against low voltage shorting



#### Additional features

Accessories. See pages 72-79

These Wrenches are preset type torque tools. They must be set to the required torque value by using a Torque Analyser like the DREMOTEST E. **See page 64 for details** 

Tool pre-set at point of order

Tool can be kept accurate and up to date with our Calibration service. **See page 82 for details** 

TBN 10 50V

Slipping Mechanism Incorrect tightening is impossible



Breaking Mechanism Incorrect tightening is unlikely



Vant to know how to use <u>this tool?</u>

| Order  |              | Rang      | ye            |       |        |      |               |
|--------|--------------|-----------|---------------|-------|--------|------|---------------|
| Code   | Model        | ISO       | Imperial      | Drive | k mm 🖌 | kg 🚽 | Repeatability |
| 011108 | TBN 2 50V    | 0.4-2 N.m | 3.5-18 lbf.in | 1/4"  | 105    | 0.17 | +/- 6%        |
| 011208 | TBN 10 50V   | 1-10 N.m  | 9-89 lbf.in   | 1/4"  | 105    | 0.17 | +/- 6%        |
| 011062 | TSN 25 D 50V | 5-25 N.m  | 4-18 lbf.ft   | 1/4"  | 220    | 0.40 | +/- 4%        |
| 011072 | TSN 25 A 50V | 5-25 N.m  | 4-18 lbf.ft   | 3/8″  | 220    | 0.40 | +/- 4%        |
|        |              |           |               |       | İTTTTT |      |               |

# **Switch Operated Signal Torque Wrenches** Torque range from 0.4 to 200 N.m

Switch Operated Signal Torque Wrenches are process control tools that provide absolute confidence that the correct level of torque has been applied. As well as the Slipping or Breaking Mechanism, that reduces or eliminates the risk of incorrect tightening, the tool also sends a signal each time the wrench achieves its pre-set torque value. This makes these tools suitable for production line control or to provide a counting function, as they can be connected to the customers production systems.

TSN 25 A Sw

TBN 25 S

Slipping Mechanism



Breaking Mechanism



#### INDUSTRY SECTORS

Manufacturing









# Switch Operated Signal Torque Wrenches Ranges: TSP, TSN & TBN

Absolute accuracy and consistency. Accurate process control is ensured by eliminating or reducing under and over tightening, due to the unique Slipping or Breaking Technology

- Better production control. These wrenches confirm that the tightening process has been performed by validating that the torque wrenches have operated at a pre-set torque value. A signal is sent upon each successful activation of the wrench, that can be used to control production flow or count completed tightenings
- **Cost effective.** These tools can easily be integrated into most Production Lines as the output signal is simply a switch opening and closing
- **Ease of use.** Tools can be used with confidence by operators at any skill level, due to unique slipping or breaking mechanism

#### Additional features

- A Signal Delay Unit (SDU) can be used to reduce the risk of missing wrench activations by extending the time of the signal output
- Two types of cables are available either a 5 metre, straight cable (Order Code: D94402) or a 1.5 metre coiled cable (Order Code: D94406)
- Universal Switch Module (Order Code: B25900) is connected via cable to the Production Line Control System

For End Fittings, **see pages 72-74** 







| Order  |              | <b>→</b> Ra | nge 🗕 🔶 🕨     |             |                          |      |               | ISO 6789 |
|--------|--------------|-------------|---------------|-------------|--------------------------|------|---------------|----------|
| Code   | Model        | ISO         | Imperial      | Drive       | <b>k</b> mm* <b>&gt;</b> | kg J | Repeatability | Class    |
| 056093 | TSP 5 Sw     | 1-5 N.m     | 10-45 lbf.in  | ¥4″         | 335                      | 0.53 | +/- 6%        | 2C       |
| 056103 | TSP 10 Sw    | 2-10 N.m    | 20-90 lbf.in  | 1/4         | 335                      | 0.53 | +/- 6%        | 2C       |
| 011003 | TSN 25 D Sw  | 5-25 N.m    | 4-18 lbf.ft   | 1/4"        | 366                      | 0.68 | +/- 4%        | 2C       |
| 011013 | TSN 25 A Sw  | 5-25 N.m    | 4-18 lbf.ft   | 3/8         | 366                      | 0.68 | +/- 4%        | 2C       |
| 011033 | TSN 55 Sw    | 15-55 N.m   | 10-40 lbf.ft  | 3/8°        | 474                      | 1.14 | +/- 4%        | 2C       |
| 011053 | TSN 125 Sw   | 40-125 N.m  | 30-90 lbf.ft  | 1/2"        | 610                      | 1.70 | +/- 4%        | 2C       |
| 011103 | TBN 2 Sw     | 0.4-2 N.m   | 3.5-18 lbf.in | Captive Pin | 255                      | 0.45 | +/- 6%        | 2C       |
| 011113 | TBN 2 G Sw   | 0.4-2 N.m   | 3.5-18 lbf.in | 9×<br>12    | 133                      | 0.13 | +/- 6%        | 2C       |
| 011203 | TBN 10 Sw    | 1-10 N.m    | 9-89 lbf.in   | Captive Pin | 255                      | 0.47 | +/- 6%        | 2C       |
| 011213 | TBN 10 G Sw  | 1-10 N.m    | 9-89 lbf.in   | 9×<br>12    | 133                      | 0.15 | +/- 6%        | 2C       |
| 050003 | TBN 25 Sw    | 5-25 N.m    | 4-18 lbf.ft   | 16          | 415                      | 0.75 | +/- 4%        | 2C       |
| 050013 | TBN 25 G Sw  | 5-25 N.m    | 4-18 lbf.ft   | 9×<br>12    | 415                      | 0.75 | +/- 4%        | 2C       |
| 050103 | TBN 65 Sw    | 10-65 N.m   | 7-48 lbf.ft   | 16          | 452                      | 1.09 | +/- 4%        | 2C       |
| 050113 | TBN 65 G Sw  | 10-65 N.m   | 7-48 lbf.ft   | 9×<br>12    | 452                      | 1.09 | +/- 4%        | 2C       |
| 050203 | TBN 135 Sw   | 27-135 N.m  | 18-100 lbf.ft | 16          | 558                      | 1.68 | +/- 4%        | 2C       |
| 050213 | TBN 135 G Sw | 27-135 N.m  | 18-100 lbf.ft | 9×<br>12    | 558                      | 1.68 | +/- 4%        | 2C       |
| 050303 | TBN 200 Sw   | 40-200 N.m  | 29-147 lbf.ft | 16          | 670                      | 1.74 | +/- 4%        | 2C       |
| 050313 | TBN 200 G Sw | 40-200 N.m  | 29-147 lbf.ft | 14 ×<br>18  | 670                      | 1.74 | +/- 4%        | 2C       |

# **Torcofix Production Clicker Torque Wrenches** Torque range from 2 to 200 N.m

Versatile Production tools, with a range of interchangeable end fittings, designed for accurate and repeated torque application. An audible click provides tightening process control.

Clicking Mechanism Incorrect tightening is possible

Torcofix 85 G





Consumer Products Audible click providing accurate process control. The risk of under and over tightening is reduced, as a click can be heard and felt when the preset torque is reached

Preset torque. Enhanced tightening process control, as unauthorised adjustment of the level of torque is not possible. These tools must be set to the required torque value by using a Torque Analyser like the DREMOTEST E. See page 64 for details Long tool life. High quality, robust design and construction, further guaranteed by a two year warranty

Multiple industrial applications. The versatile design allows the use of a range of end fittings and ratchets.

| Order<br>Code |                | <b>∢</b> Ra | nge — 🔶 🔸       | <b>k</b> mm <b>x</b> | ↓ kg ↓ |      | ISO 6789<br>Class |    |
|---------------|----------------|-------------|-----------------|----------------------|--------|------|-------------------|----|
| 024430        | Torcofix 25 G  | 5-25 N.m    | 3.7-18 lbf.ft   | 9x<br>12             | 180    | 0.21 | +/- 4%            | 2C |
| 024450        | Torcofix 50 G  | 10-50 N.m   | 7.5-37.5 lbf.ft | 9x<br>12             | 240    | 0.27 | +/- 4%            | 2C |
| 024470        | Torcofix 85 G  | 17-85 N.m   | 12.5-65 lbf.ft  | 9x<br>12             | 320    | 0.34 | +/- 4%            | 2C |
| 024490        | Torcofix 200 G | 40-200 N.m  | 30-150 lbf.ft   | 14 X<br>18           | 400    | 0.75 | +/- 4%            | 2C |

# TSC Adjustable Slipping Torque Wrenches

# Torque range from 1 to 10 N.m

Compact, versatile and lightweight tools which eliminate over-tightening in a wide range of industrial applications, including maintenance and repair. Calibrated scale allows for adjustment of torque. EPA compliant.



TSC 10

Slipping Mechanism



- Absolute accuracy and consistency. Accurate process control is ensured by eliminating under and over tightening, due to the unique Slipping Technology
- Calibrated scale. A visible scale allows the user to adjust the tool to their desired torque setting, enabling a range of different torque settings to be applied
- **Ease of use.** Can be used in restricted spaces through its compact slimline design
- Electronics. Ideal for safe electronic component assembly and servicing, as this tool is EPA compliant for use in Electrostatically Sensitive Areas

- Long tool life. High quality, durable design and construction, minimises replacement and downtime costs
- Production efficiency. Improved operator comfort and productivity, from the ergonomic design, that includes lightweight materials and moulded plastic handgrip
- Tool can be kept accurate and up to date with our Calibration service.
   See page 82 for details
- Versatility. Versatile tools ideal for Maintenance & Repair applications where a range of torques can be applied quickly and easily to a variety of fasteners and connectors

#### INDUSTRY SECTORS



Consumer Products Vant to know how to use this tool?

ΎΠΠΙ

| Order  |        |              | ISO 6789    |       |        |       |          |       |     |
|--------|--------|--------------|-------------|-------|--------|-------|----------|-------|-----|
| Code   | Model  | Range        | ليتتبلينينا | Drive | k mm 🖌 | ↓ g ↓ | Accuracy | Class | EPA |
| 056020 | TSC 5  | 1-5 N.m      | 0.05 N.m    | 1/4"  | 195    | 235   | +/- 6%   | 2A    | 1   |
| 056040 | TSC 10 | 2-10 N.m     | 0.1 N.m     | 1/4″  | 195    | 235   | +/- 6%   | 2A    | 1   |
| 056060 | TSC 45 | 10-45 lbf.in | 0.5 lbf.in  | 1/4"  | 195    | 235   | +/- 6%   | 2A    | 1   |
| 056080 | TSC 90 | 20-90 lbf.in | 1.0 lbf.in  | 1/4"  | 195    | 235   | +/- 6%   | 2A    | 1   |
|        |        |              |             |       |        |       |          |       |     |



pre-setting of torque. EPA compliant.

ATB 5

INDUSTRY SECTORS



Manufacturing



GEDORE

**Breaking Mechanism** Incorrect tightening is unlikely



# ATB Adjustable Breaking Torque Wrenches ATB 2.5, 5 & 10

- Accuracy and consistency. Improved process control is ensured by reducing the risk of under and over tightening, due to the unique Breaking Technology
- Calibrated scale. A visible micrometer style scale allows the user to adjust the tool quickly and easily to their desired torque setting, enabling a range of different torque settings to be applied
- **Ease of use.** Can be used in restricted spaces through its compact design
- Electronics. Ideal for safe electronic component assembly and servicing, as this tool is EPA compliant for use in Electrostatically Sensitive Areas

• Long tool life. High quality, durable design and construction, minimises replacement and downtime costs

- Process Control. Reduces the likelihood of warranty and rework by assuring process control through accurate and repeatable torque application
- Production efficiency. Improved operator comfort and productivity, from the ergonomic design, which includes lightweight materials and moulded plastic handgrip
- Versatility. Versatile tools ideal for Maintenance & Repair applications where a range of torques can be applied quickly and easily to a variety of fasteners and connectors



#### Additional features

N.m or lbf.in versions come with either an 8 mm spigot or a 9x12 rectangular fitting

Can be supplied as part of a Customised Kit

For details of accessories, **see pages 72-79** 

Tool can be kept accurate and up to date with our Calibration service. **See page 82 for details** 





| Order  |           | <           | Ca          | librated Range — | >           |          |                      |      |          | ISO 6789 |   |
|--------|-----------|-------------|-------------|------------------|-------------|----------|----------------------|------|----------|----------|---|
| Code   | Model     | ISO         | ليتتبلينينا | Imperial         | ليتتبلينينا | Drive    | <b>k</b> mm <b>x</b> | kg J | Accuracy | Class    |   |
| 050520 | ATB 2.5   | 50-250 cN.m | 1.25 cN.m   | -                | -           | 8        | 190                  | 0.24 | +/- 6%   | 2A       | 1 |
| 050525 | ATB 2.5   | -           | -           | 4.5-22.5 lbf·in  | 0.1 lbf.in  | 8        | 190                  | 0.24 | +/- 6%   | 2A       | 1 |
| 050527 | ATB 2.5 G | 50-250 cN.m | 1.25 cN.m   | -                | -           | 9×<br>12 | 192                  | 0.27 | +/- 6%   | 2A       | 1 |
| 050532 | ATB 2.5 G | -           | -           | 4.5-22.5 lbf.in  | 0.1 lbf.in  | 9x<br>12 | 192                  | 0.27 | +/- 6%   | 2A       | 1 |
| 050500 | ATB 5     | 1-5 N.m     | 0.025 N.m   | -                | -           | 8        | 220                  | 0.29 | +/- 6%   | 2A       | 1 |
| 050505 | ATB 5     | -           | -           | 10-45 lbf·in     | 0.25 lbf.in | 8        | 220                  | 0.29 | +/- 6%   | 2A       | 1 |
| 050507 | ATB 5 G   | 1-5 N.m     | 0.025 N.m   | -                | -           | 9x<br>12 | 230                  | 0.29 | +/- 6%   | 2A       | 1 |
| 050512 | ATB 5 G   | -           | -           | 10-45 lbf·in     | 0.25 lbf.in | 9×<br>12 | 230                  | 0.29 | +/- 6%   | 2A       | 1 |
| 050550 | ATB 10    | 2-10 N.m    | 0.05 N.m    | -                | -           | 8        | 220                  | 0.30 | +/- 6%   | 2A       | 1 |
| 050555 | ATB 10    | -           | -           | 20-90 lbf·in     | 0.5 lbf.in  | 8        | 220                  | 0.30 | +/- 6%   | 2A       | 1 |
| 050557 | ATB 10 G  | 2-10 N.m    | 0.05 N.m    | -                | -           | 9×<br>12 | 230                  | 0.30 | +/- 6%   | 2A       | 1 |
| 050562 | ATB 10 G  | -           | -           | 20-90 lbf·in     | 0.5 lbf.in  | 9×<br>12 | 230                  | 0.30 | +/- 6%   | 2A       | 1 |



# **ATB Adjustable Breaking Torque Wrenches** Torque range from 5 to 100 N.m

High quality, versatile, tools that have been designed and engineered to reduce the risk of under and over tightening in Production,

Service and Repair. The Calibrated Scale allows for pre-setting of torque.

Breaking Mechanism Incorrect tightening is unlikely Mar

Ĩ.

ATB 100

ATB 25 showing N.m Scale

I N D U S T R Y S E C T O R S

Maintenance & Repair









- Manufacturing



# ATB Adjustable Breaking Torque Wrenches ATB 25, 50 & 100

- Accuracy and consistency. Improved process control is ensured by reducing the risk of under and over tightening, due to the unique Breaking Technology
- Calibrated scale. A visible micrometer style scale allows the user to adjust the tool quickly and easily to their desired torque setting, enabling a range of different torque settings to be applied
- Long tool life. High quality, durable design and construction, minimises replacement and downtime costs
- Process Control. Reduces the likelihood of warranty and rework by assuring process control through accurate and repeatable torque application
- Production efficiency. Improved operator comfort and productivity, from the ergonomic design, which includes lightweight materials and moulded plastic handgrip



#### Additional features

- ¼", ¾", ½" interchangeable ratchet heads come as standard
- Available in N.m or lbf.in or lbf.ft versions
- For details of Wrench End Fittings & Sockets. See pages 72-74
- Tool can be kept accurate and up to date with our Calibration service.
   See page 82 for details







| Want to | know how   |
|---------|------------|
| to use  | this tool? |
| Van     | Tul        |
| YOU     | Tube       |
|         |            |

| Order  |          | <b>←</b>   | Calibra     | ated Range ——  | <b>&gt;</b>  |               |                      |      |          | ISO 6789 |
|--------|----------|------------|-------------|----------------|--------------|---------------|----------------------|------|----------|----------|
| Code   | Model    | ISO        | ليتتبلينينا | Imperial       | ليتتبلينينا  | Drive         | <b>k</b> mm <b>x</b> | kg J | Accuracy | Class    |
| 050636 | ATB 25 D | 5-25 N.m   | 0.1 N.m     | -              | -            | 1/4           | 345                  | 1.11 | +/- 4%   | 2A       |
| 050641 | ATB 25 D | -          | -           | 50-250 lbf·in  | 1 lbf.in     | 1/4           | 345                  | 1.11 | +/- 4%   | 2A       |
| 050646 | ATB 25 D | -          | -           | 4-20 lbf·ft    | 0.1 lbf.ft   | 1/4"          | 345                  | 1.11 | +/- 4%   | 2A       |
| 050638 | ATB 25 A | 5-25 N.m   | 0.1 N.m     | -              | -            | 3/8"          | 345                  | 1.12 | +/- 4%   | 2A       |
| 050643 | ATB 25 A | -          | -           | 50-250 lbf·in  | 1 lbf.in     | 3/8″          | 345                  | 1.12 | +/- 4%   | 2A       |
| 050648 | ATB 25 A | -          | -           | 4-20 lbf·ft    | 0.1 lbf.ft   | 3/ <u>8</u> ″ | 345                  | 1.12 | +/- 4%   | 2A       |
| 050685 | ATB 50   | 10-50 N.m  | 0.25 N.m    | -              | -            | 3/8"          | 365                  | 1.14 | +/- 4%   | 2A       |
| 050690 | ATB 50   | -          | -           | 120-440 lbf·in | 2 lbf.in     | 3/8"          | 365                  | 1.14 | +/- 4%   | 2A       |
| 050695 | ATB 50   | -          | -           | 7-37 lbf·ft    | 0.125 lbf.ft | 3/8″          | 365                  | 1.14 | +/- 4%   | 2A       |
| 050735 | ATB 100  | 20-100 N.m | 0.5 N.m     | -              | -            | 1/2"          | 400                  | 1.30 | +/- 4%   | 2A       |
| 050740 | ATB 100  | -          | -           | 240-880 lbf·in | 4 lbf.in     | 1 <u>/2</u> " | 400                  | 1.30 | +/- 4%   | 2A       |
| 050745 | ATB 100  | -          | -           | 14-74 lbf·ft   | 0.25 lbf.ft  | 1/2"          | 400                  | 1.30 | +/- 4%   | 2A       |





clear scale design and simple to use locking mechanism



Interchangeable 1/4" and 3/8" Square Drive



Push Through 1/2" Square Drive



| Order  |              | ◄           | Calibrated Rang | e>              | •     |        |      |          | ISO6789 |
|--------|--------------|-------------|-----------------|-----------------|-------|--------|------|----------|---------|
| Code   | Model        | ISO         | ليتتبلينينا     | Imperial        | Drive | k mm 🖌 | kg J | Accuracy | Class   |
| 024060 | Torcofix 5   | 1-5 N.m     | 0.025 N.m       | 0.75-3.7 lbf.ft | 1/4   | 224    | 0.32 | +/- 6%   | 2A      |
| 024080 | Torcofix 25  | 5-25 N.m    | 0.1 N.m         | 3.7-18 lbf.ft   | 1/4   | 285    | 0.45 | +/- 4%   | 2A      |
| 024125 | Torcofix 50  | 10-50 N.m   | 0.25 N.m        | 7.5-37 lbf.ft   | 3/8"  | 335    | 0.54 | +/- 4%   | 2A      |
| 024140 | Torcofix 100 | 20-100 N.m  | 0.5 N.m         | 15-75 lbf.ft    | 1/2   | 394    | 0.90 | +/- 4%   | 2A      |
| 024160 | Torcofix 200 | 40-200 N.m  | 1 N.m           | 30-150 lbf.ft   | 1/2   | 485    | 1.10 | +/- 4%   | 2A      |
| 024180 | Torcofix 300 | 60-300 N.m  | 1 N.m           | 45-220 lbf.ft   | 1/2   | 577    | 1.40 | +/- 4%   | 2A      |
| 024200 | Torcofix 400 | 80-400 N.m  | 1 N.m           | 60-300 lbf.ft   | 3/4   | 686    | 2.00 | +/- 4%   | 2A      |
| 024220 | Torcofix 550 | 110-550 N.m | 1 N.m           | 80-405 lbf.ft   | 3/4   | 957    | 3.80 | +/- 4%   | 2A      |
| 024240 | Torcofix 750 | 150-750 N.m | 1 N.m           | 110-550 lb.ft   | 3/4"  | 1236   | 4.80 | +/- 4%   | 2A      |

# Torcofix Adjustable Clicker Torque Wrenches

# Torque range from 2 to 400 N.m

Adjustable general tools for Service and Repair. Ideal for covering a wide number of tasks as the operator can adjust them to deliver a broad range of torques.

GEDORE

Audible click provides accuracy and control. The risk of under and over

tightening is reduced, as a click can be

heard and felt when the preset torque

Efficient to use. Minimises the time to

complete the task as these wrenches

Long tool life. High quality, robust design and construction, further

guaranteed by a two year warranty

are quick and easy to adjust due to the clear scale design and simple to use

is reached

locking mechanism

An audible click informs user that correct torque has been applied. Multiple applications via range of end fittings and ratchets.



Clicking Mechanism

Torcofix End Fittings. The design

and ratchets for multiple industrial

Versatility. Versatile tools ideal for Maintenance & Repair applications

where a range of torques can be

of fasteners and connectors

applied quickly and easily to a variety

applications. See pages 72-74

allows the use of a range of end fittings



INDUSTRY SECTORS

Maintenance & Repair



Aerospace





to use this tool?

YOTH

| Order  |              | <          | - Calibrated Ran | ge>           |            |        |      |          | ISO 6789 |
|--------|--------------|------------|------------------|---------------|------------|--------|------|----------|----------|
| Code   | Model        | ISO        | ليتتبلينينا      | Imperial      | Drive      | k mm 🖌 | kg J | Accuracy | Class    |
| 024305 | Torcofix 25  | 5-25 N.m   | 0.10 N.m         | 3.7-18 lbf.ft | 16         | 280    | 0.50 | +/- 4%   | 2A       |
| 024325 | Torcofix 50  | 10-50 N.m  | 0.25 N.m         | 7.5-37 lbf.ft | 16         | 330    | 0.60 | +/- 4%   | 2A       |
| 024340 | Torcofix 100 | 20-100 N.m | 0.50 N.m         | 15-75 lbf.ft  | 16         | 375    | 0.60 | +/- 4%   | 2A       |
| 024360 | Torcofix 200 | 40-200 N.m | 1 N.m            | 30-150 lbf.ft | 16         | 465    | 0.80 | +/- 4%   | 2A       |
| 024380 | Torcofix 300 | 60-300 N.m | 1 N.m            | 45-220 lbf.ft | 16         | 565    | 1.20 | +/- 4%   | 2A       |
| 024400 | Torcofix 400 | 80-400 N.m | 1 N.m            | 60-300 lbf.ft | 16         | 650    | 1.50 | +/- 4%   | 2A       |
| 024510 | Torcofix 25  | 5-25 N.m   | 0.10 N.m         | 3.7-18 lbf.ft | 9×<br>12   | 280    | 0.50 | +/- 4%   | 2A       |
| 024520 | Torcofix 50  | 10-50 N.m  | 0.25 N.m         | 7.5-37 lbf.ft | 9×<br>12   | 330    | 0.60 | +/- 4%   | 2A       |
| 024530 | Torcofix 100 | 20-100 N.m | 0.50 N.m         | 15-75 lbf.ft  | 9x<br>12   | 375    | 0.60 | +/- 4%   | 2A       |
| 024540 | Torcofix 200 | 40-200 N.m | 1 N.m            | 30-150 lbf.ft | 14 X<br>18 | 465    | 0.80 | +/- 4%   | 2A       |
| 024550 | Torcofix 300 | 60-300 N.m | 1 N.m            | 45-220 lbf.ft | 14 X<br>18 | 565    | 1.20 | +/- 4%   | 2A       |
| 024560 | Torcofix 400 | 80-400 N.m | 1 N.m            | 60-300 lbf.ft | 14 x<br>18 | 650    | 1.50 | +/- 4%   | 2A       |



# Weld Stud Test Tools WSTT 2, 10 & 20

- Audit. These versatile Quality Audit tools enable Quick Go/No Go tests for weld stud integrity to be carried out quickly and efficiently on a wide range of weld studs from M2.5 to M12
- Accuracy. The risk of under and over tightening is reduced, due to the unique Breaking Technology
- **Easy and effective to use.** Intuitive & bi-directional "T" shaped handle for easy operation
- End Fittings. A range of Interchangeable end fittings are available. End fittings are available for use with most popular weld stud thread sizes and lengths

- Long tool life. High quality, robust design and construction, further guaranteed by a two year warranty
- Versatility. A range of compatible interchangeable End Fittings are available, for use with most popular weld stud thread sizes and lengths.
   See pages 72-74 for details

#### Additional features

 All WSTT Tools are supplied with a Calibration Certificate when ordered with an attached end fitting

These Wrenches are preset type torque tools. There is no external adjustment scale and they must be set to the required torque value by using a Torque Analyser. **See page 63** for details



#### Typical Maximum Torque Test Values (Capacitor discharge method)

| Threaded<br>Stud | Steel<br>4.8 Weldable | Stainless Steel<br>1.403/03 (A2-50) | Aluminium Alloy<br>AlMg3 F23 | Copper<br>CuZn37 (Ms63) |
|------------------|-----------------------|-------------------------------------|------------------------------|-------------------------|
| M3               | 1.2 N.m               | 0.75 N.m                            | 0.6 N.m                      | 0.9 N.m                 |
| M4               | 2.7 N.m               | 1.4 N.m                             | 1.3 N.m                      | 1.9 N.m                 |
| M5               | 5.4 N.m               | 3.5 N.m                             | 2.9 N.m                      | 4.0 N.m                 |
| M6               | 9.2 N.m               | 5.7 N.m                             | 4.6 N.m                      | 6.75 N.m                |
| M8               | 12.0 N.m              | 14.0 N.m                            | 11.25 N.m                    | 16.5 N.m                |
| M10              | 18.0 N.m              | 20.0 N.m                            | _                            | _                       |

NOTE: These torque values are for guidance only. The torque for each application should be calculated and proven by practical test.

| Order  |         | ← Calibrat |               |                      |       |
|--------|---------|------------|---------------|----------------------|-------|
| Code   |         |            |               | <b>k</b> mm <b>x</b> | ↓ ġ ↓ |
| 055005 | WSTT 2  | 0.4-2 N.m  | 3.5-18 lbf.in | 120                  | 215   |
| 055000 | WSTT 10 | 1-10 N.m   | 9-90 lbf.in   | 120                  | 215   |
| 055010 | WSTT 20 | 4-20 N.m   | 35-180 lbf.in | 220                  | 320   |

#### Metric or Imperial range of End Fittings available

| <                     | Met                                  | tric                  | <b></b>                              | Metric |                       |                                      |                       |                                      |
|-----------------------|--------------------------------------|-----------------------|--------------------------------------|--------|-----------------------|--------------------------------------|-----------------------|--------------------------------------|
| Order Code<br>WSTT 10 | Weld Stud Thread<br>x Maximum Length | Order Code<br>WSTT 20 | Weld Stud Thread<br>x Maximum Length |        | Order Code<br>WSTT 10 | Weld Stud Thread<br>x Maximum Length | Order Code<br>WSTT 20 | Weld Stud Thread<br>x Maximum Length |
| 055020                | M2.5 x 25                            | 055050                | M5 x 50                              |        | 055075                | 4-40 x 1.5"                          | 055105                | 10-32 x 2.5"                         |
| 055025                | M3 x 50                              | 055055                | M6 x 50                              |        | 055080                | 6-32 x 2"                            | 055110                | 10-24 x 2.5"                         |
| 055030                | M4 x 50                              | 055060                | M8 x 50                              |        | 055085                | 8-32 x 2"                            | 055115                | 1⁄4-20 x 4"                          |
| 055035                | M5 x 50                              | 055065                | M10 x 75                             |        | 055090                | 10-32 x 2.5"                         | 055120                | <sup>5</sup> /16-18 x 4"             |
| 055040                | M6 x 50                              | 055070                | M12 x 75                             |        | 055095                | 10-24 x 2.5"                         | 055125                | ³⁄8-16 x 4"                          |
| 055045                | M8 x 50                              | -                     | -                                    |        | 055100                | 1⁄4-20 x 4"                          | -                     | -                                    |

# RTC

# **RTU Dynamic Torque Limiters** Torque range from 0.2 to 10 N.m

RTU Dynamic Torque Limiters allow conventional Hand and Power tools to be easily converted into versatile pre-set Torque Tools, giving reliable torque limited fastening to joints. Rotary Torque Units (RTUs) provide a wide range of potential

GEDOR

Slipping Mechanism Incorrect tightening is impossible applications where conventional torque screwdrivers or wrenches might not be appropriate. They are particularly well-suited for maintenance and repair use in manufacturing industries, as they guarantee absolute accuracy and repeatability.

**RTU 1000 HEX** 

RTU 1000

#### INDUSTRY SECTORS

Maintenance & Repair





# **RTU Dynamic Torque Limiters**

- Accuracy. Accurate process control is ensured by eliminating under and over tightening, due to the unique proven Gedore Torque Slipping Technology. Absolute accuracy is delivered time after time
- Ease of use. Simply install the RTU to the end of a traditional power tool or hand tool, converting it to a torque tool
- Flexibility. A range of heavy duty torque limiters creates tools that are suitable for just about any occasion – and can be moved if required
- Power, where you need it. Powered assembly applications can be performed accurately and quickly, including the tightening of bottles, caps and lids

Versatility. New higher range RTU gives users the ability to tighten torque up to 13.5Nm

Wide range of applications. Can be used where conventional torque screwdrivers or wrenches might not be appropriate

#### Additional features

 Custom designs and higher torque settings are available



# New for 2017

# Torque range up to 13.5 N.m

The **Gedore Torque RTU14** is the latest revision to the range of Rotary Torque Units (RTU) Dynamic Torque Limiters. The new streamlined look is modern and sleek with the added functionality giving customers even greater versatility. The RTU14 allows the RTU family, for the first time, to provide one way action. This allows users who require it, the ability to tighten fasteners to the selected torque and also loosen the fasteners back off.



/ant to know how to use this tool?

YOTI Tube

Watch our video



#### 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, hence 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 Calibration Service offers a wide range of Calibration Services. These can be carried out at our UKAS accredited Calibration Laboratory or at your own premises.

### 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<br>Calibration<br>Analysers | Screwdriver<br>Testing | Wrench<br>Testing | Powered<br>Tool Testing | Memory<br>Capability | PC Download<br>Capability | Interchangeable<br>Sensors |
|------------------------------------|------------------------|-------------------|-------------------------|----------------------|---------------------------|----------------------------|
| CAPTURE<br>System                  | 1                      | 1                 | 1                       | 1                    | 1                         | 1                          |
| ET-cal II<br>Compact               | 1                      | 1                 | 1                       | 1                    | ✓                         | -                          |
| MTP<br>MTS                         | <i>\</i>               | -<br>/            |                         |                      | -                         | -                          |
| DREMOTEST I                        | : 🗸                    | <b>√</b>          | -                       | -                    | 1                         | -                          |

# New CAPTURE Hub for 2017

In 2017, the new **Gedore Torque CAPTURE Hub** joins the industry-leading Capture range of calibration equipment. Portable and robust, this lineside torque analyser provides highly accurate measurement for Power Torque Tools (as well as hand tools) and incorporates an integrated Display and Sensor.

# **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

| GED | OREF | the line of | -      |     |
|-----|------|-------------|--------|-----|
| -   | •    | Bearing -   | -      |     |
|     |      |             | 0.0 N. | m   |
|     |      |             | 1.00   | 1.0 |
|     |      |             | 0.0    | 0.0 |
|     |      |             | 0.0    | 0.0 |
|     | -    |             | 0.0    | 0.0 |
| ×   | -    |             | 0.0    | 0.0 |
| -   |      |             | 0.0    | 0.0 |
| 0   | -    | B reaction  |        | -   |

CAPTURE Display will change from red to blue in Jan 2017

| # - X           | 0.0 0.0  | Order Code | Model  |
|-----------------|--|------------|--|
| 9 m F-          | 0.0 0.0<br>hager   | 036710     | CAPTURE Manager - PC Software                      |
| -               | and the second second second second second second second second second second second second second second second | 036700     | CAPTURE Display                                    |
| CAPTURE Manager |  | 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 0.2 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.

:00

| Order<br>Code | Model                               |
|---------------|-------------------------------------|
| 036771        | CAPTURE Sensor ISO 1500/90° Adaptor |
| D18205        | CAPTURE Sensor ISO-A Mount          |
| 036772        | CAPTURE Sensor Quick Change Plate   |



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

• Easy to Repair. Modular design allows for simple component replacement

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 67) 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 UKAS certificate to BS 7882:2008 Class 1 or better

**New for 2017** CS1 1.N.m sensor

> Vant to know how to use this tool? You Tube

| 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                       |

| Order<br>Code | Model   | Range        | Drive | <b>k</b> mm <b>≯</b><br>HxWxD | ↓ kg ↓ | Hole<br>Centres (mm) | Mounting Hole Size       | Fixings Supplied |        |
|---------------|---------|--------------|-------|-------------------------------|--------|----------------------|--------------------------|------------------|--------|
| 036805        | CS 2    | 0.2-2 N.m    | 1/4"  | 62 x 85 x 65                  | 0.50   | 56                   | M8 x 1.25 (10 Deep Min)  | M8 x 50 *        | P34320 |
| 036807        | CS 5    | 0.5-5 N.m    | 1/4″  | 62 x 85 x 65                  | 0.50   | 56                   | M8 x 1.25 (10 Deep Min)  | M8 x 50 *        | P34320 |
| 036810        | CS 10   | 1-10 N.m     | 1/4"  | 62 x 85 x 65                  | 0.50   | 56                   | M8 x 1.25 (10 Deep Min)  | M8 x 50 *        | P34320 |
| 036815        | CS 25   | 2.5-25 N.m   | 3/8"  | 62 x 85 x 65                  | 0.50   | 56                   | M8 x 1.25 (10 Deep Min)  | M8 x 50 *        | P34320 |
| 036820        | CS 50   | 5-50 N.m     | 3/″   | 62 x 85 x 65                  | 0.57   | 56                   | M8 x 1.25 (10 Deep Min)  | M8 x 50 *        | P34320 |
| 036825        | CS 100  | 10-100 N.m   | 1/_"  | 62 x 85 x 65                  | 0.60   | 56                   | M8 x 1.25 (10 Deep Min)  | M8 x 50 *        | P34320 |
| 036830        | CS 250  | 25-250 N.m   | 1/2"  | 82 x 120 x 87                 | 1.45   | 79                   | M12 x 1.75 (16 Deep Min) | M12 x 1.75 *     | P34330 |
| 036835        | CS 500  | 50-500 N.m   | 3/,"  | 82 x 120 x 87                 | 1.6    | 79                   | M12 x 1.75 (16 Deep Min) | M12 x 1.75 *     | P34330 |
| 036845        | 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 |

# **CAPTURE Hub**

The Gedore Torque CAPTURE Hub is the 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. The new CAPTURE Hub will replace the existing ET-cal II.

# New for 2017

# To include innovative rundown fixture system

#### 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 the existing CAPTURE Manager PC software and users with extra Sensors can plug them into the external port be used with the 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 Sensor when not in use it is supplied in a high impact plastic carry case

UKAS Certification. System come complete with UKAS certificate to BS 7882:2008 Class 1 or better

- 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 ISOA Loading System (Adaptor required – see page 63)



| Order<br>Code | Model | Range      | Drive | <b>k</b> mm <b>≯</b><br>H x W x D | ↓ kg ↓ | Hole<br>Centres (mm) |
|---------------|-------|------------|-------|-----------------------------------|--------|----------------------|
| -             | CH 2  | 0.2-2 N.m  | 1/4   | 50 x 200 x 110                    | 0.50   | 56                   |
| -             | CH 5  | 0.5-5 N.m  | 1/4"  | 50 x 200 x 110                    | 0.50   | 56                   |
| -             | CH 25 | 2.5-25 N.m | 3/8   | 50 x 200 x 110                    | 0.50   | 56                   |
|               |       |            |       |                                   |        |                      |

# Capture

# **CAPTURE** Manager

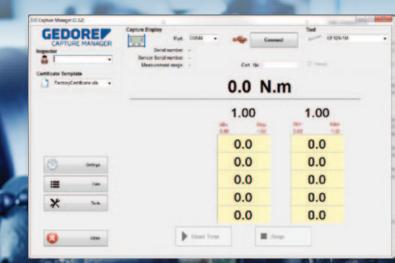
The CAPTURE Manager is PC Software that allows storage, management and analysis of tools and data readings. It is part of the

- 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

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

Test Wizard. Ensures tools are performing to the required standard through the ISO 6789:2003 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 6789:2003



CAPTURE Manager

Order Code

036710 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: 2008

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

SEDORE



| Order  | Calibrated Range |              |               | Maximum    | RPM          | Width  | Height                  | Depth  |      |  |
|--------|------------------|--------------|---------------|------------|--------------|--------|-------------------------|--------|------|--|
| Code   | Model            | ISO          | Drive         | Continuous | Intermittent | k mm 🖌 | <b>k</b> mm <b>&gt;</b> | k mm 🖌 | kg 🗸 |  |
| 036510 | XR 2 HD          | 0.2-2 N.m    | V.            | 5000       | 11000        | 116    | 56.0                    | 68.0   | 0.21 |  |
| 036520 | XR 5 HD          | 0.5-5 N.m    | 1/4           | 5000       | 11000        | 116    | 56.0                    | 68.0   | 0.21 |  |
| 036530 | XR 20 HD         | 2-20 N.m     | 1/4           | 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/ <u>2</u> ″ | 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 |  |

# ET-cal II Compact Torque Calibration Analysers

# Torque range from 0.1 to 17 N.m

Compact and versatile portable Hand and Power Torque Tool Analysers, with multiple units of measurement and test modes, that can be used for a wide range of applications across most industries.

Note: this product will be REPLACED by the Capture Hub (page 60) in 2017.

Accurate measurement. These Analysers are designed to monitor Torque Tool performance, for both Hand and Power Tools. Their high accuracy of +/- 1% of reading together with the supplied PC software make them perfect for testing, storing and analysing tool data with capacity of 150 data points

**Battery or Mains Powered.** Can be used for Calibration Laboratories and Production Lines

Ease of use. These Analysers enable users to become proficient swiftly by minimising product training times, due to their ease of use **Efficient.** Torque Tools can be calibrated at the point of use, using battery power and onboard memory, hence minimising recalibration timescales

Versatile. The flexible design minimises investment, as the ET-cal II is designed to calibrate a wide range of Torque Tools including both Power and Hand Tools, as well as Electric Torque Screwdrivers. Designed to test torque in both clockwise and anticlockwise directions

ET-cal II

| Order  |           | ← Calibrated Range |                |  |      |   |  |  |  |
|--------|-----------|--------------------|----------------|--|------|---|--|--|--|
| Code   | Model     | ISO                | Imperial       | Drive                                    | kg 🚽 |   |  |  |  |
| 035270 | ET-cal 1  | 0.1-1 N.m          | 0.8-8.8 lbf·in | $(1)^{+}$                                | 2.00 |   |  |  |  |
| 035280 | ET-cal 5  | 0.5-5 N.m          | 4.4-44 lbf·in  | <b>V</b> + <sup>1</sup> / <sub>4</sub> " | 2.00 |   |  |  |  |
| 035290 | ET-cal 10 | 1-10 N.m           | 8.8-88 lbf·in  | <b>1</b> + 1/4"                          | 2.00 | - |  |  |  |
| 035295 | ET-cal 17 | 1.7-17 N.m         | 15-150 lbf-in  | <b>₩</b> + <u>1/4</u> "                  | 2.00 |   |  |  |  |

# 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.

Accurate measurement. Designed to monitor low torgue values for Hand operated Torque Tools

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

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



|        | know how   |
|--------|------------|
| to use | this tool? |
| You    | Tube       |
| Watch  | our video  |

| Order  | Order Calibrated Range |             |             |               |                         |   |        |          |  |
|--------|------------------------|-------------|-------------|---------------|-------------------------|---|--------|----------|--|
| Code   | Model                  | ISO         | ليتتبلينينا | Imperial      | ليتتبلينينا             | Drive   | ↓ kg ↓ | Accuracy |  |
| 058100 | MTP 10                 | 0-10 cN.m   | 0.5 cN.m    | 0-14 ozf∙in   | 1 ozf∙in                | 1/4   | 0.98   | +/- 2%   |  |
| 058110 | MTS 35                 | 7-35 cN.m   | 0.5 cN.m    | 10-50 ozf∙in  | 0.5 ozf·in              | 1/4 + 1/4   | 3.20   | +/- 2%   |  |
| 058120 | MTS 130                | 26-130 cN.m | 2 cN.m      | 36-180 ozf-in | 2 ozf·in                | <b>1</b> + 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              | <b>V</b> + <u>V</u>   | 3.20   | +/- 2%   |  |
| 058140 | MTS 1200               | 2.4-12 N.m  | 0.2 N.m     | 24-120 lbf·in | 2 lbf·in                | 1 <u>/</u> 4" <b>+</b> 3 <u>/8</u> "                          | 3.20   | +/- 2%   |  |
| 058150 | MTS 2500               | 5-25 N.m    | 0.5 N.m     | 44-220 lbf·in | 5 lbf·in                | <sup>1</sup> / <sub>4</sub> " + <sup>3</sup> / <sub>8</sub> " | 3.20   | +/- 2%   |  |
| ΠΠΠΠ   |                        |             |             |               | İ T T T T T T T T T T T |   | immi   |          |  |

# **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

ú

166600000000

DREMOTEST E 12

DREMOTEST E 55

| Order  |                  |              |            |                 |              |   |      |          |
|--------|------------------|--------------|------------|-----------------|--------------|---|------|----------|
| Code   | Model            | ISO          | Resolution | Imperial        | Resolution   | Drive   | kg J | Accuracy |
| 035205 | DREMOTEST E 12   | 0.2-12 N.m   | 0.001 N.m  | 1.8-106 lbf·in  | 0.001 lbf·in | $\frac{1}{4} + \frac{1}{4} + \frac{3}{8}$                     | 2.60 | +/- 1%   |
| 035220 | 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%   |
| 035210 | 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%   |
| 035230 | DREMOTEST E 1100 | 90-1100 N.m  | 1 N.m      | 66-811 lbf·ft   | 1 lbf·ft     | $\left[\frac{1}{2}\right]^{n} + \left[\frac{3}{4}\right]^{n}$ | 10.0 | +/- 1%   |
| 035240 | 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.** 1400:1 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 6789:2003 for the calibration of Torque Wrenches





| Order  |   | Maximu   | m Capacity  | Maximum Tool Length     |        |
|--------|---|----------|-------------|-------------------------|--------|
| Code   | Model                                       | ISO      | Imperial    | <b>k</b> mm <b>&gt;</b> | ↓ kġ ↓ |
| 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 | ET-cal 15 Mounting Kit                      | 30 N.m   | 22 lbf.ft   | 300                     | 1.60   |
| D18205 | Capture Sensor & ET-cal Compact ISO-A Mount | 30 N.m   | 22 lbf.ft   | 300                     | 3.40   |
| 036771 | Capture Sensor ISO 1500/90° Adaptor         | 1500 N.m | 1107 lbf.ft | -                       | 2.60   |

# Special Torque Tool Projects

# Introduction

Our 75 years experience and expertise as the leading producer of torque tools mean that we are able to meet the needs of our customers for tools to meet the most exacting and specialised torque applications.

At our UK site, the world's most advanced and fully-integrated torque tool manufacturing facility, we are able to combine innovative expert engineering design skills with our high quality core product range to produce bespoke tools.

For our customers, this means that whatever challenges they are facing, we are able to find cost-effective solutions. For the Royal Navy (see right-hand facing page), we were able to help save money and lives. Your needs may be less dramatic, but we will take them just as seriously.

#### In this section you will find further information about:

Custom Tool Kit Designs

Tailor-made Torque Screwdrivers and Wrenches

Private Label Torque Tools

#### HMS Illustrious: the power of precision

The correct application of torque guarantees the safety, reliability and longer life of products. This was certainly the case when Gedore Torque worked with the Ministry of Defence and the Royal Navy to build a custom tool kit for maintaining lifejackets on ships like the famous aircraft carrier, HMS Illustrious. With more than 1,000 crew and Flight Arm personnel on HMS Illustrious alone, that's a serious task. Said Petty Officer Keith Spiller, responsible for the project, 'At the end of the day, by applying exactly the correct level of torque to the equipment, we're saving lives – and we're also saving money.' Our Custom Design Service can create a complete Torque Tool Kit, tailor-made to meet your application needs.

Experience and expertise. A wide range of Tool Kit needs can be met using our Custom Design Service. This draws upon our experience and expert engineering design skills to produce bespoke tools to meet the most exacting of application needs

**Tool Cases.** To meet operational needs, Tool Kits can be supplied in bespoke tool cases and foam cut outs. These can range from standard design for use in normal working environments to high performance cases for use in harsh operational conditions

Tool Kit Versatility. A combination of Gedore Torque and outsourced tools can be created to meet your particular specification



# **Custom Torque Tool Designs**

Our Custom Design Service can create Torque Tools to meet specific operational needs.

- Experience and expertise. Our Custom Design Service can design and produce Torque Tools to a customised specification to meet your operational and application needs. This draws upon our experience and expert engineering design skills to produce bespoke tools to meet the most exacting of application needs
- Innovation. Our track record of torque innovation means that we are able to meet the wide range of performance criteria required from the modern Torque Tool with a range of innovative tool designs and appropriate materials
- Operational Integrity. Our tried and tested tool designs and technology can be depended upon to produce bespoke successful engineering solutions

Modification of RTU for Track Bolt Tightening

# **Private Label Torque Tools**

# Our Custom Design Service can create a complete Torque Tool Kit, tailor-made to meet your application needs.

Image enhancement. As well as enabling you to carry out the best possible job, private label tools can also provide you with a more professional image

Our tools, your design. A full Design Service is available for custom label tools that use a variety of materials, component design, tool labelling and custom tool certification

#### Technology-aided design.

Cost-effective own branding has been made easier by the use of our modern 3D CAD Systems, laser engraving machines and custom label manufacturing technology Let's Torque. Use our Tool Selector at www.gedore-torque.com/tool-selector to select the right tool for your application, then tell us your branding requirements on +44 (0) 1483 894 476

Private Branding of an ADS Dial Wrench

Private Label of an Ergo Quickset Adjustable Torque Screwdriver

TSN Wrench Private Branding



# Torque Accessories

# **Torque Wrench End Fittings**

# Captive Pin Type

Metric & Imperial Accessories compatible with TBN Preset Breaking Torque Wrenches, Models TBN 2 & 10 (see page 38)



Ring End \* Ring End supplied as bi-hex or 6pt hex



Setting Adaptor <sup>1</sup>/4" SD for use with Calibration Analysers

| <   | Metric     |     |            |     |            |     |                 |
|-----|------------|-----|------------|-----|------------|-----|-----------------|
|     | Order code |     | Order code |     | Order code |     |                 |
| A/F | Open End   | A/F | Ring End*  | A/F | Flared End | A/F | Setting Adaptor |
| 3.2 | 012000     | 3.2 | 012250     | 3.2 | -          | 3.2 | 012700          |
| 4   | 012005     | 4   | 012255     | 4   | -          | 4   | 012700          |
| 5   | 012010     | 5   | 012260     | 5   | -          | 5   | 012700          |
| 5.5 | 012015     | 5.5 | 012265     | 5.5 | -          | 5.5 | 012700          |
| 6   | 012020     | б   | 012270     | 6   | -          | 6   | 012705          |
| 7   | 012025     | 7   | 012275     | 7   | -          | 7   | 012705          |
| 8   | 012030     | 8   | 012280     | 8   | 012505     |     | 012705          |
| 9   | 012035     | 9   | 012285     | 9   | 012510     | 9   | 012705          |
| 10  | 012040     | 10  | 012290     | 10  | 012515     | 10  | 012710          |
| 11  | 012045     | 11  | 012295     | 11  | 012520     | 11  | 012710          |
| 12  | 012050     | 12  | 012300     | 12  | 012525     | 12  | 012710          |
| 13  | 012055     | 13  | 012305     | 13  | 012530     | 13  | 012710          |
| 14  | 012060     | 14  | 012310     | 14  | 012535     | 14  | 012715          |
| 15  | 012065     | 15  | 012315     | 15  | 012540     | 15  | 012715          |
| 16  | 012070     | 16  | 012320     | 16  | 012545     | 16  | 012715          |
| 17  | 012075     | 17  | 012325     | 17  | 012550     | 17  | 012715          |
| 18  | 012080     | 18  | 012330     | 18  | -          | 18  | 012720          |
| 19  | 012085     | 19  | 012335     | 19  | 012555     | 19  | 012720          |
| 20  | 012090     | 20  | 012340     | 20  | -          | 20  | 012720          |
| 21  | 012095     | 21  | 012345     | 21  | -          | 21  | 012720          |
| 22  | 012100     | 22  | 012350     | 22  | 012560     | 22  | 012722          |
| 23  | 012105     | 23  | 012355     | 23  | -          | 23  | 012722          |
| 24  | 012110     | 24  | 012360     | 24  | 012565     | 24  | 012722          |
| 25  | 012115     | 25  | 012365     | 25  | -          | 25  | 012722          |

| -                | ✓ Imperial |                  |            |                  |            |                  |                 |  |
|------------------|------------|------------------|------------|------------------|------------|------------------|-----------------|--|
|                  | Order code |                  | Order code |                  | Order code |                  | Order code      |  |
| A/F              | Open End   | A/F              | Ring End*  | A/F              | Flared End | A/F              | Setting Adaptor |  |
| 5/32             | 012150     | 5/32             | 012400     | 5/32             | -          | 5/32             | 012725          |  |
| 3/16             | 012155     | 3/16             | 012405     | 3/16             | -          | 3/16             | 012725          |  |
| 7/32             | 012160     | 7/32             | 012410     | 7/32             | -          | 7/32             | 012725          |  |
| 1/4              | 012165     | 1/4              | 012415     | 1/4              | 012600     | 1/4              | 012725          |  |
| 5/16             | 012175     | 5/16             | 012420     | 5/16             | 012605     | 5/16             | 012730          |  |
| 3/8              | 012185     | 3/8              | 012425     | 3/8              | 012610     | 3/8              | 012730          |  |
| 7/16             | 012195     | 7/16             | 012430     | 7/16             | 012615     | 7/16             | 012730          |  |
| 1/2              | 012200     | 1/2              | 012435     | 1/2              | 012620     | 1/2              | 012730          |  |
| <sup>9</sup> /16 | 012205     | <sup>9</sup> /16 | 012440     | <sup>9</sup> /16 | 012625     | <sup>9</sup> /16 | 012735          |  |
| 5/8              | 012210     | 5/8              | 012445     | 5/8              | 012630     | 5/8              | 012735          |  |
| 11/16            | 012215     | 11/16            | 012450     | 11/16            | -          | 11/16            | 012735          |  |
| 3/4              | 012220     | 3/4              | 012455     | 3/4              | 012635     | 3/4              | 012735          |  |
| 13/16            | 012225     | 13/16            | 012460     | 13/16            | -          | 13/16            | 012740          |  |
| 7/8              | 012230     | 7/8              | 012465     | 7/8              | 012640     | 7/8              | 012740          |  |
| 15/16            | 012235     | 15/16            | 012470     | 15/16            | -          | 15/16            | 012740          |  |
| 1                | 012240     | 1                | 012475     | 1                | 012645     | 1                | 012740          |  |

#### To convert TBN 2 & 10 to 1/4" Square Drive

| Туре       | Order Code | Centre<br>k mm 🖌 |
|------------|------------|------------------|
| 1/4 Fixed  | A36340     | 27               |
| 1/4 Rachet | A73640     | 27               |



#### Hex Key Setting Adaptors

| Order Code | Hex Key Sizes<br>A/F |  |
|------------|----------------------|--|
| A45271     | 1.0 - 2.5 mm         |  |
| A45272     | 3.0 - 5.0 mm         |  |
| A45273     | 6.0 - 8.0 mm         |  |

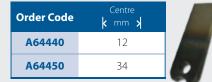


#### Hex Key Adaptors

| Order Code | Hex Key Sizes<br>k mm 🖌 | 6  |
|------------|-------------------------|----|
| A37610     | 1.0 - 2.5 mm            | 43 |
| A37620     | 3.0 - 5.0 mm            |    |
| A38350     | 6.0 - 8.0 mm            |    |

#### Blank End

For making up Specials Material 070M20 (EN3B)



## **Torque Wrench End Fittings**

8 mm Spigot Type

Metric & Imperial Accessories compatible with ATB Adjustable Breaking Torque Wrenches, Models ATB 2.5, 5 & 10 (see page 47)





Ring End \* Ring End supplied as bi-hex or 6pt hex



| <   |            |     | Metric     |     |            | >   |
|-----|------------|-----|------------|-----|------------|-----|
|     | Order code |     | Order code |     | Order code |     |
| A/F | Open End   | A/F | Ring End*  | A/F | Flared End | A/F |
| 3.2 | 049000     | 3.2 | 049250     | 3.2 | -          | 3.2 |
| 4   | 049005     | 4   | 049255     | 4   | -          | 4   |
| 5   | 049010     | 5   | 049260     | 5   | -          | 5   |
| 5.5 | 049015     | 5.5 | 049265     | 5.5 | -          | 5.5 |
| 6   | 049020     | 6   | 049270     | 6   | -          | 6   |
| 7   | 049025     | 7   | 049275     | 7   | -          | 7   |
| 8   | 049030     | 8   | 049280     | 8   | 049505     | 8   |
| 9   | 049035     | 9   | 049285     | 9   | 049510     | 9   |
| 10  | 049040     | 10  | 049290     | 10  | 049515     | 10  |
| 11  | 049045     | 11  | 049295     | 11  | 049520     | 11  |
| 12  | 049050     | 12  | 049300     | 12  | 049525     | 12  |
| 13  | 049055     | 13  | 049305     | 13  | 049530     | 13  |
| 14  | 049060     | 14  | 049310     | 14  | 049535     | 14  |
| 15  | 049065     | 15  | 049315     | 15  | 049540     | 15  |
| 16  | 049070     | 16  | 049320     | 16  | 049545     | 16  |
| 17  | 049075     | 17  | 049325     | 17  | 049550     | 17  |
| 18  | 049080     | 18  | 049330     | 18  | -          | 18  |
| 19  | 049085     | 19  | 049335     | 19  | 049555     | 19  |
| 20  | 049090     | 20  | 049340     | 20  | -          | 20  |
| 21  | 049095     | 21  | 049345     | 21  | -          | 21  |
| 22  | 049100     | 22  | 049350     | 22  | 049560     | 22  |
| 23  | 049105     | 23  | 049355     | 23  | -          | 23  |
| 24  | 049110     | 24  | 049360     | 24  | 049565     | 24  |
| 25  | 049115     | 25  | 049365     | 25  | _          | 25  |

| -     | Order code |                  | Imperial<br>Order code |                     | Order code | ->    |
|-------|------------|------------------|------------------------|---------------------|------------|-------|
| A/F   | Open End   | A/F              | Ring End*              | A/F                 | Flared End | A/F   |
| 5/32  | 049150     | 5/32             | 049400                 | 5/32                | -          | 5/32  |
| 3/16  | 049155     | <sup>3</sup> /16 | 049405                 | 3/16                | -          | 3/16  |
| 7/32  | 049160     | 7/32             | 049410                 | 7/32                | -          | 7/32  |
| 1/4   | 049165     | 1/4              | 049415                 | 1/4                 | 049600     | 1/4   |
| 5/16  | 049175     | <sup>5</sup> /16 | 049420                 | <sup>5</sup> /16    | 049605     | 5/16  |
| 3/8   | 049185     | 3/8              | 049425                 | 3/8                 | 049610     | 3/8   |
| 7/16  | 049195     | 7/16             | 049430                 | 7/16                | 049615     | 7/16  |
| 1/2   | 049200     | 1/2              | 049435                 | 1/2                 | 049620     | 1/2   |
| 9/16  | 049205     | 9/16             | 049440                 | 9/16                | 049625     | 9/16  |
| 5/8   | 049210     | 5/8              | 049445                 | 5/8                 | 049630     | 5/8   |
| 11/16 | 049215     | 11/16            | 049450                 | 11/16               | -          | 11/16 |
| 3/4   | 049220     | 3/4              | 049455                 | 3/4                 | 049635     | 3/4   |
| 13/16 | 049225     | 13/16            | 049460                 | 1 <sup>13</sup> /16 | -          | 13/16 |
| 7/8   | 049230     | 7/8              | 049465                 | 7/8                 | 049640     | 7/8   |
| 15/16 | 049235     | 15/16            | 049470                 | 15/16               | -          | 15/16 |
| 1     | 049240     | 1                | 049475                 | 1                   | 049645     | 1     |

#### To convert 8mm Spigot to 1/4" Square Drive

| Туре      | Order Code | Centre<br>k mm 🖌 |
|-----------|------------|------------------|
| 1/4 Fixed | A29071     | 25               |

| Туре       | Order Code | Centre<br>k mm k |
|------------|------------|------------------|
| 1/4 Rachet | A28990     | 25               |





# Torque Wrench End Fittings

# 16 mm Spigot Type

Metric & Imperial Accessories compatible with the following Torque Wrenches:

- ATB Adjustable Breaking Torque Wrenches, models ATB 25, 50 & 100. See page 47
- TBN Preset Breaking Torque Wrenches, models 25, 65,135 & 200.
   See page 38-39
- Torcofix Production Clicker Torque
   Wrenches. See page 50-51
- TSC Adjustable Slipping Torque Wrenches. **See page 44**







Open End

**Ring End** 

| -   |            |     | Metric ——— |     | <b>&gt;</b> |
|-----|------------|-----|------------|-----|-------------|
|     | Order code |     | Order code |     | Order code  |
| A/F | Open End   | A/F | Ring End*  | A/F | Flared End  |
| 7   | 026020     | 7   | 027220     | 7   | 028190      |
| 8   | 026040     | 8   | 027240     | 8   | 028200      |
| 9   | 026060     | 9   | 027260     | 9   | 028210      |
| 10  | 026080     | 10  | 027280     | 10  | 028220      |
| 11  | 026100     | 11  | 027300     | 11  | 028240      |
| 12  | 026120     | 12  | 027320     | 12  | 028260      |
| 13  | 026140     | 13  | 027340     | 13  | 028280      |
| 14  | 026160     | 14  | 027360     | 14  | 028300      |
| 15  | 026180     | 15  | 027380     | 15  | 028320      |
| 16  | 026200     | 16  | 027400     | 16  | 028340      |
| 17  | 026220     | 17  | 027420     | 17  | 028360      |
| 18  | 026240     | 18  | 027440     | 18  | 028380      |
| 19  | 026260     | 19  | 027460     | 19  | 028400      |
| 20  | 026280     | 20  | 027480     | 20  | 028420      |
| 21  | 026300     | 21  | 027500     | 21  | 028440      |
| 22  | 026320     | 22  | 027520     | 22  | 028460      |
| 23  | 026340     | 23  | 027540     | 23  | 028480      |
| 24  | 026360     | 24  | 027560     | 24  | 028500      |
| 25  | 026380     | 25  | -          | 25  | -           |
| 26  | 026400     | 26  | 027600     | 26  | -           |
| 27  | 026420     | 27  | 027620     | 27  | 028520      |
| 30  | 026440     | 30  | -          | 30  | -           |
| 32  | 026460     | 32  | -          | 32  | -           |



Blank End Fitting 16 mm Spigot Type Order Code: A55230

Available to customers wishing to make special spanner end attachments





Square Drive 16 mm Spigot Type Order Code: 3/8" - 029040 1/2" - 029060

Ratchet Head Square Drive 16 mm Spigot Type Order Code: 3/8" - 029010 1/2" - 029030

| -                 | Order code |       | • Metric ———<br>Order code |       | Order code |
|-------------------|------------|-------|----------------------------|-------|------------|
| A/F               | Open End   | A/F   | Ring End*                  | A/F   | Flared End |
| 5/16              | 026620     | 5/16  | 027720                     | 5/16  | -          |
| 3/8               | 026640     | 3/8   | 027740                     | 3/8   | 028600     |
| 7/16              | 026650     | 7/16  | 027750                     | 7/16  | 028620     |
| 1/2               | 026660     | 1/2   | 027760                     | 1/2   | 028640     |
| 9/16              | 026680     | 9/16  | 027780                     | 9/16  | 028660     |
| 5/8               | 026690     | 5/8   | 027790                     | 5/8   | 028680     |
| 11/16             | 026700     | 11/16 | 027800                     | 11/16 | 028700     |
| 3/4               | 026710     | 3/4   | 027810                     | 3/4   | 028710     |
| 13/16             | 026720     | 13/16 | 027820                     | 13/16 | 028720     |
| 7/8               | 026740     | 7/8   | 027840                     | 7/8   | 028740     |
| 15/16             | 026750     | 15/16 | 027850                     | 15/16 | 028750     |
| 1                 | 026760     | 1     | 027860                     | 1     | 028760     |
| <sup>11</sup> /16 | 026770     | 11/16 | 027880                     | 11/16 | 028770     |
| 11/8              | 026780     | 11/8  | -                          | 11/8  | 028780     |
| 13/16             | 026800     | 13/16 | 027920                     | 13/16 | 028800     |
| 11/4              | 026820     | 11/4  | -                          | 11/4  | -          |



Hex Key Adaptors

 
 Order Code
 Hex Key Sizes k mm x

 A38940
 2.5 - 5.0

 A38950
 6.0 - 8.0

### Hexagon Nut Sockets

Metric & Imperial Accessories to complement our range of Standard and Insulated Torque Wrenches (pages 40-41)











#### 1/4" Square Drive Hexagon Nut Sockets

| •      | —— Metric —— | <b></b> |        | —— Imperial —— | <b></b> | 4      | <b></b>                |       |
|--------|--------------|---------|--------|----------------|---------|--------|------------------------|-------|
| Туре   | Order code   | A/F     | Туре   | Order code     | A/F     | Туре   | Imperial<br>Order code | A/F   |
| NS 4   | 030500       | 4       | NS 8BA | 031100         | .152    | NS 187 | 030800                 | 3/16  |
| NS 4.5 | 030520       | 4.5     | NS 7BA | 031120         | .172    | NS 219 | 030820                 | 7/32  |
| NS 5   | 030540       | 5       | NS 6BA | 031140         | .193    | NS 234 | 030840                 | 15/64 |
| NS 5.5 | 030560       | 5.5     | NS 5BA | 031160         | .220    | NS 250 | 030860                 | 1/4   |
| NS 6   | 030580       | 6       | NS 4BA | 031180         | .248    | NS 266 | 030880                 | 7/64  |
| NS 7   | 030600       | 7       | NS 3BA | 031200         | .282    | NS 281 | 030900                 | 9/32  |
| NS 8   | 030620       | 8       | NS 2BA | 031220         | .324    | NS 312 | 030920                 | 5/16  |
| NS 9   | 030640       | 9       | NS 1BA | 031240         | .365    | NS 344 | 030940                 | 11/32 |
| NS 10  | 030660       | 10      | NS 0BA | 031260         | .413    | NS 375 | 030960                 | 3/8   |
| NS 11  | 030680       | 11      | -      | -              | -       | NS 437 | 030980                 | 7/16  |
| NS 12  | 030700       | 12      | -      | -              | -       | NS 500 | 031000                 | 1/2   |
| NS 13  | 030720       | 13      | -      | -              | -       | -      | -                      | -     |
| NS 14  | 030740       | 14      | -      | -              | -       | -      | -                      | -     |

#### Metric Insulated Nut Sockets

| ✓ 50V for Low → Voltage Applications |              |  |  |  |  |  |  |
|--------------------------------------|--------------|--|--|--|--|--|--|
| Order Code<br>A/F 1/4" in Drive      |              |  |  |  |  |  |  |
| 8                                    | 030620A11030 |  |  |  |  |  |  |
| 10                                   | 030660A11030 |  |  |  |  |  |  |
| 11                                   | -            |  |  |  |  |  |  |
| 12                                   | 030700A11030 |  |  |  |  |  |  |
| 13                                   | 030720A11030 |  |  |  |  |  |  |
| 14                                   | 030740A11030 |  |  |  |  |  |  |
| 16                                   | -            |  |  |  |  |  |  |
| 17                                   | -            |  |  |  |  |  |  |
| 18                                   | -            |  |  |  |  |  |  |



### **Torque Screwdriver Accessories**

Accessories to complement our range of Torque Screwdrivers (see page 18) Please note Screwdriver dimensions may change subject to availability









Pozidriv

Phillips

Torx

#### 1/4" A/F Hexagon Shank Bits & Blades for use with all 1/4" FH Screwdrivers

| <    | Blad       | de           | <b>&gt;</b> |       | Pozidr     | iv —— | <b>&gt;</b>          | <     | Phillip    | s ——— | <b>&gt;</b> | <    | Torx       |      |        |
|------|------------|--------------|-------------|-------|------------|-------|----------------------|-------|------------|-------|-------------|------|------------|------|--------|
| Туре | Order code | Size         | k mm x      | Туре  | Order code | Size  | <b>k</b> mm <b>x</b> | Туре  | Order code | Size  | k mm x      | Туре | Order code | Size | k mm 🗴 |
| 3    | 029300     | 3 mm x 0.5   | 39          | No. 0 | 029500     | No. 0 | 25                   | No. 0 | 029600     | No. 0 | 25          | TX6  | 029740     | 1.65 | 25     |
| 4.5  | 029320     | 4.5 mm x 0.6 | 5 39        | No. 1 | 029520     | No. 1 | 50                   | No. 1 | 029610     | No. 1 | 50          | TX8  | 029760     | 2.28 | 25     |
| 5.5  | 029340     | 5.5 mm x 0.8 | 3 39        | No. 2 | 029540     | No. 2 | 50                   | No. 2 | 029620     | No. 2 | 50          | TX10 | 029770     | 2.72 | 25     |
| 6.5  | 029360     | 6.5 mm x 1.2 | 2 39        | No. 3 | 029560     | No. 3 | 50                   | No. 3 | 029640     | No. 3 | 50          | TX20 | 029780     | 3.84 | 25     |
| 8    | 029380     | 8 mm x 1.6   | 39          | -     | -          | -     | -                    | -     | -          | -     | -           | TX25 | 029790     | 4.39 | 25     |









| < _       | Blade      |                      | <     | — Pozidriv — | >                    | <b>←</b> | — Phillips — | >                    | <    | — Torx —   | >                    |
|-----------|------------|----------------------|-------|--------------|----------------------|----------|--------------|----------------------|------|------------|----------------------|
| Туре      | Order code | <b>k</b> mm <b>x</b> | Туре  | Order code   | <b>k</b> mm <b>x</b> | Туре     | Order code   | <b>k</b> mm <b>x</b> | Туре | Order code | <b>k</b> mm <b>x</b> |
| 3 x 0.5   | 029305     | 50                   | No. 0 | 029505       | 50                   | No. 0    | 029605       | 50                   | TX06 | 029745     | 50                   |
| 4 x 0.5   | 029325     | 50                   | No. 1 | 029525       | 50                   | No. 1    | 029615       | 50                   | TX08 | 029765     | 50                   |
| 5.5 x 0.8 | 029345     | 50                   | No. 2 | 029545       | 50                   | No. 2    | 029625       | 50                   | TX10 | 029775     | 50                   |
| 6.5 x 1.2 | 029361     | 50                   | No. 3 | 029565       | 50                   | No. 3    | 029645       | 50                   | TX20 | 029785     | 50                   |

#### Lock on T-Bar



Accidental tool disengagement is prevented through the Lock On feature



### **Torque Screwdriver Accessories**

Accessories to complement our range of Torque Screwdrivers (see page 18)

#### Converters & Adaptors

| Туре      | Order code | <b>← To Convert</b><br>From   | Tool Drive><br>To            | <b>k</b> mm <b>y</b>    |
|-----------|------------|-------------------------------|------------------------------|-------------------------|
| FSHA      | A35640     | 1/4"                          | $\left< \frac{1}{4} \right>$ | 30 (1 <sup>1</sup> /8") |
| Converter | 029200     | $\langle \frac{1}{4} \rangle$ | 1/4"                         | 50 (2")                 |
| MSHA      | A25420     | $\left< \frac{1}{4} \right>$  | 1/4"                         | 25                      |

#### Inline Freewheel Adaptor

| Туре  | Order code | Torque        | Freewheel     |  |  |  |  |  |
|-------|------------|---------------|---------------|--|--|--|--|--|
| FWA-R | A8842R     | Clockwise     | Anticlockwise |  |  |  |  |  |
| FWA-L | A8842L     | Anticlockwise | Clockwise     |  |  |  |  |  |





A8842R

Absorbs unwanted shock loads by transmitting torque in one direction and freewheeling in the opposite direction

Converter

Roller clutch for minimal backlash and drag

#### Special Crowsfoot Spanner Ends

| Order Code | A/F Size |
|------------|----------|
| C62890     | 3/8 in   |
| C62891     | 1/2 in   |
| C62892     | 8 mm     |
| C62893     | 14 mm    |
| C62894     | 18 mm    |
| C62895     | 5 mm     |
| C62896     | 1/4 in   |
| C62897     | 19 mm    |
| C62898     | 6 mm     |





# **Convertors and Adaptors**

Accessories to complement our range of Torque Screwdrivers and Wrenches

| Socket Blanks |            |          |                                    |                    |  |  |  |
|---------------|------------|----------|------------------------------------|--------------------|--|--|--|
| Туре          | Order code | <b>ч</b> | Metric Dimen <del>sions</del><br>B | c                  |  |  |  |
| SB2           | A15720     | 1/4      | 5/8                                | 7/8                |  |  |  |
| SB3           | A16200     | 3/8      | 13/16                              | 11/8               |  |  |  |
| SB4           | A16210     | 1/2      | 1                                  | 11/4               |  |  |  |
| SB5           | A14790     | 3/4      | 11/2                               | 2 5/16             |  |  |  |
| SB6           | A14800     | 1        | 2                                  | 2 <sup>9</sup> /16 |  |  |  |



| ~   |                  |      |
|-----|------------------|------|
| Inr | 11/Or            | ters |
| COI | $IV \subseteq I$ |      |

| Туре | Order code | To Convert    | : Tool D <del>rive</del> |
|------|------------|---------------|--------------------------|
| DSAP | 031320     | 1/4*          | 3/8"                     |
| DPAS | 031300     | 3/ <u>8</u> ″ | 1/4°                     |
| ASEP | 031340     | 3/8"          | <sup>1</sup> ∕₂″         |
| APES | 031360     | <u>1/2</u> *  | 3/ <sub>8</sub> ″        |
| ESHP | 031380     | <u>1/2</u> "  | <sup>3</sup> /4″         |
| EPHS | 031400     | 3/4           | <sup>1</sup> ∕₂″         |
| HSGP | 031420     | 3/4           | 1″                       |
| HPGS | 031440     | 1″            | 3/4                      |





#### То

#### Hexagon Key Bits

| <             | Me   | Metric • |                      |        | Imperial   |                  |        | ◀────    | Imp            | erial ——— | <b></b> |
|---------------|--|----------|----------------------|--------|------------|------------------|--------|----------|----------------|-----------|---------|
| Туре          | Order Code   | A/F      | <b>k</b> mm <b>x</b> | Туре   | Order Code | A/F              | k mm 🗴 | Туре     | Order Code     | A/F       | k mm 🖌  |
| IB 1.5        | 030100   | 1.5      | 25                   | IB 093 | 030300     | 3/32             | 25     | G2       | B1607A         | .035      | 35      |
| IB 2          | 030120   | 2        | 25                   | IB 109 | 030310     | 7/64             | 25     | G3       | B1607B         | .050      | 35      |
| IB 2.5        | 030140   | 2.5      | 25                   | IB 125 | 030320     | 1/8              | 25     | G4       | B1607C         | .062      | 35      |
| IB 3          | 030160   | 3        | 25                   | IB 141 | 030330     | <sup>9</sup> /64 | 25     | G5       | B1607D         | 5/64      | 35      |
| IB 4          | 030180   | 4        | 25                   | IB 156 | 030340     | 5/32             | 25     | -        | -              | -         | -       |
| IB 5          | 030200   | 5        | 25                   | IB 187 | 030360     | 3/16             | 25     | -        | -              | -         | -       |
| IB 6          | 030220   | 6        | 25                   | IB 281 | 030380     | 7/32             | 25     | -        | -              | -         | -       |
| IB 7          | 030240   | 7        | 25                   | IB 250 | 030400     | 1/4              | 25     | -        | -              | -         | -       |
| IB 8          | 030260   | 8        | 25                   | IB 312 | 030410     | 5/16             | 25     | -        | -              | -         | -       |
| Note: IB Bits | Note: IB Bits will require 1/4" FSHA Adaptor unless your tool is already a 1/4" FH Drive |          |                      |        |            |                  |        | Integral | 1/4" Square Dr | ive       |         |





# Special Extension Spanners & Adaptors

#### Accessories to complement the Dial Measuring Wrench Range (page 12)

When design or space limitations preclude the use of a Dial Measuring Wrench and a standard Nut Socket, special Extension Spanners can be manufactured.

These allow access and enable you to apply Torque in awkward spaces. See illustrations for typical examples.

#### To order a Special Extension Spanner

#### To order please supply the following information:

 Square drive size
 Centred distance between the square drive and the spanner end fitting
 A/F size of spanner end

End type - Ring, Open or Flared Maximum Torque to be applied A fully dimensioned drawing

Example of a Ring End type Extension Spanner

#### Table of Effective Wrench Lengths across our Range

| Model Ranges   | Effective length<br>k mm k |  |  |  |  |
|--|----------------------------|--|--|--|--|
| ADS 12/25/40   | 190                        |  |  |  |  |
| BDS 80   | 368                        |  |  |  |  |
| BDS 160/200  | 445                        |  |  |  |  |
| CDS  | 635                        |  |  |  |  |
| DDS  | 850                        |  |  |  |  |
| EDS 1727   |                            |  |  |  |  |
| Special Extension Spanners are not recommended for ADS 4 & 8 due to high accuracy at low torque ranges |                            |  |  |  |  |

# Extension Adaptors for ADS $\textcircled{\ensuremath{\mathsf{BDS}}}$ Wrenches where space is restricted

| Adaptor Model              | Order code              | Drive                       |    |
|----------------------------|-------------------------|-----------------------------|----|
| 16mm Spigot                | A96102                  | <sup>3</sup> / <sub>8</sub> | 50 |
| Tomm Spigor                | A96103                  | 1/2"                        | 0  |
| German 9x12                | A96112                  | 3/ <u>*</u>                 | S  |
| Cavity Fitting             | A96113                  | $\frac{1}{2}$               |    |
| Wedge Fitting              | A96122                  | 3/ <u>*</u>                 |    |
| neugennung                 | A96123                  | 1/2                         |    |
| Measure dimension of Adapt | tor & End Fitting for E | (see diagram above)         |    |

# How to Calculate the True Torque when using Extension Spanners

When using Extension Spanners the dial reading will not display the correct torque being applied. To ensure **True Torque** see the formula on the right to recalculate

Extension Lenath - E

Effective Wrench Length - L

Dial Reading - **DR** 

 $\frac{\mathsf{DR} \mathsf{x} (\mathsf{E} + \mathsf{L})}{\mathsf{L}} =$ 

## Technical Support

### Our Worldwide Commitment to Service

From our base in the UK, Gedore Torque provides unparalleled technical information, services and support in the UK and worldwide, with its network of factory-trained distributors.

Our commitment to Quality Assurance and Standards includes conformance with national and international standards and our own UKAS-accredited Calibration Laboratory.

With a worldwide network of factory-trained distributors, we can offer high levels of service and support, wherever you are.

#### In this section you'll find information about the following:

Calibration Service and Repairs

Quality Assurance and Standards

Calibration and Traceability

Information on Torque

Mawuli Austin, Service Technician In the calibration laboratory, we are committed to absolute precision and consistent accuracy. I am proud that every day, we achieve national and international standards on behalf of our customers.

11111111111

#### **UK Head Office**

Contact us for any technical information or support that you may need.

- Tannery Lane, Gosden Common, Bramley, Guildford, Surrey GU5 0AJ
- Phone: +44 (0) 1483 894 476
- Fax: +44 (0) 1483 898 536
- Email: salesandrepairs@gedore-torque.com

#### **Technical Support**

For expert technical advice, contact us by phone or email. If there is a problem to be discussed, or you would like a product demonstration, a visit to your site by one of our Technical Managers can be arranged.

#### Distributors

With 74 Distributors in 51 countries, our products are available and supported worldwide. All Distributors are factory-trained and are able to give a full service and to offer expert advice. Contact us (details above) for your local distributor, or visit www.gedore-torque.com

#### Website

Our website contains a wealth of product information, including a Knowledge Centre and Tool Selector www.gedore-torque.com/tool-selector

#### Videos

Our YouTube channel contains videos showing how to use most of our tools. www.youtube.com/gedore-torque







Want to know how to use this tool? You Tube Watch our video

# **Taking Care of Your Tools** Calibration, Servicing & Repair

When you buy from Gedore Torque, everything you need to maintain, service and repair your torque equipment is available in house, at our UK site. Regular re-calibration and servicing are essential if Torque Tools are to deliver absolute precision and consistent accuracy throughout their lifetime. What's more, today's Quality Assurance Systems demand that measuring torque tools and calibration equipment are checked regularly and provided with traceable calibration certificates. For these reasons, Gedore Torque offers a comprehensive Calibration, Servicing & Repair service, to ensure that your tools continue to operate to the highest standards. And in most cases, we are able to provide a 24-hour turnaround.

#### **Torque Calibration**

 Torque Calibration ensures that torque equipment operates to peak performance, ensuring absolute and consistent accuracy and adherence to National and International standards It also ensures that potential tooling problems are identified before they arise, hence ensuring that lifetime ownership costs are minimised

#### Calibration Laboratory, Servicing and Repair Centre

Gedore Torque has a UKAS-accredited Calibration Laboratory, based at our site in the UK. Here, we are able to recalibrate most Hand Torque Tools, Analysers and Transducers in accordance with National and International Standards.

Our Calibration Laboratory offers an in-depth Torque Calibration Service. This provides:

- Torque Wrench calibration to ISO 6789:2003
- Torque Sensor calibration to BS 7882:2008
- 'As found' and 'As left' Calibration Certificates
- UKAS Scope 0.14 3000 N.m

The technical competence of the Laboratory and its staff have been independently accredited by UKAS to ISO/IEC 17025:2005. UKAS (the United Kingdom Accreditation Service) is the only national accreditation body recognised by the British Government to assess the competence of organisations that provide certification, testing, inspection and calibration services.

We can also accommodate tools from other manufacturers subject to inspection and acceptance. For more information, call us on: +44 (0) 1483 892 772 or email: salesandrepairs@gedore-torque.com

#### In House Calibration Service

Our in house calibration service is a cost-effective method to ensure that your equipment is always in peak condition.

This provides:

- Gedore Torque Calibration Certificates
- Clear results
- Traceability to National Standards
- Tools that are accurate, precise and performing to the highest standard

#### Servicing and Repairs

Our tools contain moving parts that require periodic servicing and lubrication. The recommended service interval is twelve months, or more frequent if usage is high. And even in the best work environment, repairs are sometimes necessary.

That's why we offer a full and comprehensive After Sales Service. On return of any product, the work necessary to bring the torque tool to first class condition is assessed and the customer advised of the cost involved. Once the customer has given their permission to proceed, the work is carried out to an agreed timescale.

If you choose to do your own servicing, the following lubrication tables give details of the recommended oils and greases as used in our tools.

#### Tool Lubrication Table For Gedore Torque Products

|                           | Lubricants - Correct at time of going to print |                         |                               |                               |                              |                                   |   |   |   |
|---------------------------|--|-------------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------------|---|---|---|
| Torque<br>Wrenches        | Fuchs<br>Renolit CXI 2<br>Grease               | Total<br>Multis<br>MS 2 | Fuchs<br>Renolit<br>EP X1 PBF | Total Multis<br>EP2           | Silicon Grease<br>RS 555-083 | Shell Tonna 32<br>Lubricating Oil | Rocol<br>Dry Moly Paste<br>(ASP)  | Amalgam of<br>75% Dry Moly Paste<br>25% Lubricating Oil | CX HT2<br>Grease  |
| Dial Wrenches             | ADS Ratchet<br>& Pawl                          |                         |                               | BDS/CDS/DDS<br>Ratchet & Pawl | Window Assembly<br>'O' Rings |                                   |   |   |   |
| STB                       |  |                         | Spring, Cam<br>& Roller       |                               | 'O' Rings                    | Ratchet & Pawl                    |   |   |   |
| TSC & TSP                 | Bearings. TSC<br>Locking Mechanism             |                         |                               |                               |                              |                                   | Thrust Pin  |   |   |
| TSN                       |  |                         | Spring, Cam<br>& Roller       |                               | 'O' Rings                    | Ratchet & Pawl                    |   |   |   |
| TBN 2 & 10                |  | Spring                  |                               |                               |                              | Adj. Screw                        | Roller, Cam, Thrust<br>Pad, Captive Pin   |   |   |
| TBN 25,65,135<br>& 200    |  | Spring                  |                               |                               |                              |                                   | Roller, Cam, Thrust<br>Pad, Captive Pin   | Trunnion.<br>Adj. Screw                                 |   |
| ATB 5, 10, 25,<br>50, 100 |  |                         |                               |                               |                              |                                   | Adj. Screw, Captive<br>Pin, Int. Spring Adjuster,<br>Lock Knob & Adj. Screw<br>End, Ext. Handle |   | Spring,<br>Ext. Spring<br>Adjuster, Trunnion<br>Int. Handle |

| Lubricants - Correct at time of going to print |                               |                              |                              |                                       |                                 |                                    |                       |  |
|--|-------------------------------|------------------------------|------------------------------|---------------------------------------|---------------------------------|------------------------------------|-----------------------|--|
| Torque<br>Screwdrivers<br>& Analysers          | Shell Stamina<br>EP2 Grease   | Total Multis<br>EP2          | Silicon Grease<br>RS 555-083 | NYE Rheolube 368 F<br>Strained Grease | WD-40<br>Lubricant/Inhibitor    | Renolin<br>B3 - VG10               | All Purpose<br>3 in 1 |  |
| TT   |                               |                              |                              |                                       | Torsion Bars &<br>Spring Clamps |                                    | Memory<br>Assembly    |  |
| Quickset,<br>QSN & QSA                         | General Use<br>Ball Housing   | Handle Threads               | 'O' Rings                    |                                       |                                 |                                    |                       |  |
| TLS  | General Use<br>Spring Housing |                              |                              |                                       |                                 |                                    |                       |  |
| Cleanroom CRS                                  |                               |                              |                              | General Use<br>Spring Housing         |                                 |                                    |                       |  |
| MTS & MTP                                      |                               |                              |                              |                                       |                                 | Drive Spindle &<br>Needle Bearings |                       |  |
| ISO 1000 &<br>ISO 1500                         |                               | Multiplier &<br>Worm Gearbox |                              |                                       |                                 |                                    |                       |  |



### British & International Standards

Our commitment to excellence means that our own business and the tools we manufacture conform to the appropriate National and International Standards. This means that you can be assured that our products are manufactured to the highest quality standards for absolute accuracy, consistency and precision.

- Gedore Torque is assessed and registered to BS EN ISO 9001:2008 Certificate FM 00363
- All Gedore Torque tools are manufactured to the relevant British and International Engineering Standards and conform to the International Standard on Torque Tools ISO 6789:2003 or as specified.

# The International Standard ISO 6789:2003 for Hand Torque Tools states:

- The effective working range of a tool is from 20% to 100% of its maximum torque value
- The accuracy requirements for Torque Screwdrivers are +/- 6% of reading and for Torque Wrenches are +/- 4% of reading or +/- 6% for Torque Wrenches below 10 N.m
- The maximum torque value for each square drive size
- Scale and marking requirements

#### **Explanation on Terms**

- Accuracy of Measuring and Calibrated Scale Tools is their ability to deliver the torque as set on their scale, dial or digital display. This is usually expressed as a percentage of the target torque
- Resolution of Measuring and Calibrated Scale Tools is the number of divisions that their full torque range is divided into. This can be displayed as decimal places on a digital display, number of divisions on a dial or graduations on a scale
- Repeatability of Preset Tools is the ability to consistently apply the same torque in subsequent tightening operations.
   This is usually expressed as a percentage of the preset torque

- An overload ability of 125% of maximum torque capacity
- A calibration interval of 5000 cycles or 12 months
- Test and measuring procedures at 23° +/- 5°C
- The maximum permissible uncertainty of measurement of the calibration device shall be +/-1% of the indicated value

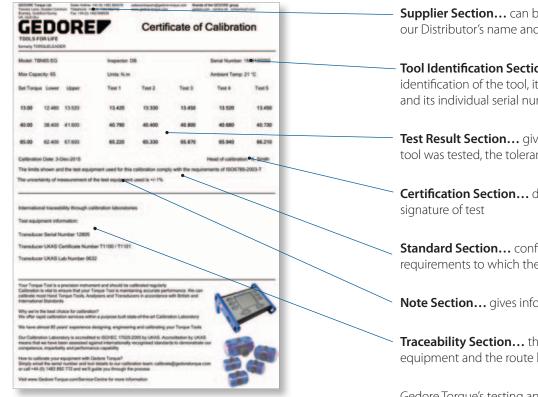
#### **Explanation on Serial Numbers**

All new and newly reconditioned Gedore Torque tools are marked with a serial number that enables **Complete Traceability.** This number is stored together with other data such as the original works order number and calibration details



# Calibration: Certification & Traceability

Regular Torque Tool Calibration and re-calibration guarantees the operator repeatable accuracy and adherence to international standards. To guarantee this, all Tools that have been calibrated or re-calibrated by Gedore Torque come with a Certificate of Calibration. This in turn provides confirmation that all equipment used by us has certification traceable to International Standards.



#### Traceability to International Standards

All equipment used by us in the Calibration of Torque Tools is regularly checked to ensure that the results obtained are accurate. All Calibration Equipment is itself assessed using equipment with certification traceable to International Standards as listed below:

#### For Length/Metre & Weight/Mass:

- Coordinate Measuring Machine
- Transfer Standards held by National Physical Laboratory
- National Physical Laboratory Stabilised Lasers
- National Standard for the Metre\*
- Trading Standards Department
- UKAS Accredited Mass Laboratory
- National Measurement Office
- International Bureau of Weights & Measures Sèvres, Paris

\*Defined as the length of the path travelled by light in vacuum during a time interval of 1/299 792 498 of a second Supplier Section... can be tailored to include our Distributor's name and address

- Tool Identification Section... for easy identification of the tool, its maximum capacity and its individual serial number
- Test Result Section... gives the normal point at which the tool was tested, the tolerances and the actual results obtained
- Certification Section... date and approval
- Standard Section... confirms the standard requirements to which the tool complies
- Note Section... gives information regarding slave pointers etc
- Traceability Section... the serial numbers of the test equipment and the route back to National Standards

Gedore Torque's testing and calibration procedures are performed using equipment traceable to National Standards

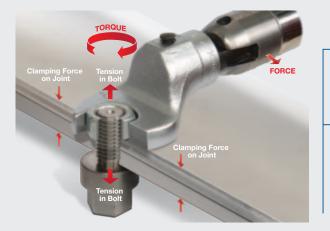
**UKAS** Accreditation Certificate for Gedore Torque's **Calibration Laboratory** & Personnel





### An Explanation of Torque

Information on Measuring Torque What you need to know to avoid incorrect tightening



- Torque is the application of a Force acting at a radial **Distance** and tending to cause rotation. Torque is used to create tension in threaded fasteners
- When the nut and bolt are tightened the two plates are clamped together. The thread converts the applied torque into tension in the bolt shank. This in turn is converted into a clamping force. The amount of tension created in the bolt is critical

#### Explanation on the creation of a Clamping Force

- The tension in the bolt creates a clamping force (generally referred to as the preload) between the two parts
- If the clamping force is too low, the fasteners can work loose due to vibration or movement between the component parts

#### Explanation on how Torque is Calculated

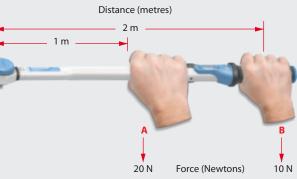
- Torque is the result of multiplying the value of **Force** applied by the **Distance** from the point of application
- Comparing the two examples see below (A and B) the same resultant torque can be achieved with a lower Force if the Distance from the nut/bolt is increased

#### Force x Distance = Torque (See right)

- Example A: 20 N x 1 m = 20 N.m
- Example B: 10 N x 2 m = 20 N.m

Some Torque Wrenches are **length dependent** that means that the actual torque applied to the fastener varies if the hand position on the wrench is varied - even with the wrench preset. This occurs if the pivot point of the wrench mechanism is not coincidental with the centre of rotation of the fastener

- If a clamping force is too high, the fastener may permanently stretch and no longer apply the required clamping force
- In severe cases the fastener may fail in assembly or during use when under load
- Some Torque Wrenches are length dependent that means that the actual torque applied to the fastener varies if the hand position on the wrench is varied - even with the wrench preset. This occurs if the pivot point of the wrench mechanism is not coincidental with the centre of rotation of the fastener



# Conversion Factors & Maximum Recommended Tightening Torques

Need help... call us on +44 (0) 1483 894 476

|                          |        |                 |        | Conversi | on Factors             |         |                |                      |         |
|--------------------------|--------|-----------------|--------|----------|------------------------|---------|----------------|----------------------|---------|
| Units to be<br>converted | ■ mN.m | — ISO —<br>cN.m | N.m    | ✓ ozf.in | — Imperial —<br>Ibf.in | lbf.ft  | <b>∢</b> gf.cm | — Metric —<br>kgf.cm | kgf.m   |
| 1 mN.m                   | 1      | 0.1             | 0.001  | 0.142    | 0.009                  | 0.0007  | 10.2           | 0.01                 | 0.0001  |
| 1 cN.m                   | 10     | 1               | 0.01   | 1.416    | 0.088                  | 0.007   | 102            | 0.102                | 0.001   |
| 1 N.m                    | 1000   | 100             | 1      | 141.6    | 8.851                  | 0.738   | 10197          | 10.20                | 0.102   |
| 1 ozf.in                 | 7.062  | 0.706           | 0.007  | 1        | 0.0625                 | 0.005   | 72             | 0.072                | 0.0007  |
| 1 lbf.in                 | 113    | 11.3            | 0.113  | 16       | 1                      | 0.083   | 1152.1         | 1.152                | 0.0115  |
| 1 lbf.ft                 | 1356   | 135.6           | 1.356  | 192      | 12                     | 1       | 13826          | 13.83                | 0.138   |
| 1 gf.cm                  | 0.098  | 0.01            | 0.0001 | 0.014    | 0.0009                 | 0.00007 | 1              | 0.001                | 0.00001 |
| 1 kgf.cm                 | 98.07  | 9.807           | 0.098  | 13.89    | 0.868                  | 0.072   | 1000           | 1                    | 0.01    |
| 1 kgf.m                  | 9807   | 980.7           | 9.807  | 1389     | 86.8                   | 7.233   | 100000         | 100                  | 1       |

|                            |                      | <b>Conversion Factors</b> |                      |                       |
|----------------------------|----------------------|---------------------------|----------------------|-----------------------|
| Thread<br>Diameter<br>(mm) | Hex Key<br>Size (mm) | Hex Key<br>Size (mm)      | Hex Key<br>Size (mm) | Hex Head<br>Size (mm) |
| M 2                        | -                    | 1.5                       | 1.27                 | 4                     |
| M 2.5                      | -                    | 2                         | 1.5                  | 5                     |
| M 3                        | 2                    | 2.5                       | 2                    | 5.5                   |
| M 4                        | 2.5                  | 3                         | 2.5                  | 7                     |
| M 5                        | 3                    | 4                         | 3                    | 8                     |
| M 6                        | 4                    | 5                         | 4                    | 10                    |
| M 7                        | -                    | -                         | -                    | 11                    |
| M 8                        | 5                    | 6                         | 5                    | 13                    |
| M 10                       | 6                    | 8                         | 6                    | 17                    |
| M 12                       | 8                    | 10                        | 8                    | 19                    |
| M 14                       | -                    | -                         | -                    | 22                    |
| M 16                       | -                    | 14                        | 10                   | 24                    |
| M 18                       | -                    | -                         | -                    | 27                    |
| M 20                       | -                    | 17                        | 12                   | 30                    |
| M 22                       | -                    | -                         | -                    | 32                    |
| M 24                       | -                    | -                         | -                    | 36                    |
| M 27                       | -                    |                           | -                    | -                     |

| Recommen             | Recommended Tightening Torques N.m |                       |  |  |  |  |  |  |
|----------------------|------------------------------------|-----------------------|--|--|--|--|--|--|
| Bold<br>Grade<br>8.8 | Bold<br>Grade<br>10.9              | Bold<br>Grade<br>12.9 |  |  |  |  |  |  |
| 0.37                 | 0.52                               | 0.63                  |  |  |  |  |  |  |
| 0.86                 | 1.21                               | 1.45                  |  |  |  |  |  |  |
| 1.3                  | 1.9                                | 2.3                   |  |  |  |  |  |  |
| 3.0                  | 4.3                                | 5.1                   |  |  |  |  |  |  |
| 6.0                  | 8.5                                | 10.2                  |  |  |  |  |  |  |
| 10.3                 | 14.7                               | 17.9                  |  |  |  |  |  |  |
| 17.2                 | 24.5                               | 28.4                  |  |  |  |  |  |  |
| 25.5                 | 35.3                               | 42.2                  |  |  |  |  |  |  |
| 50.0                 | 70.6                               | 85.3                  |  |  |  |  |  |  |
| 87.3                 | 123                                | 147                   |  |  |  |  |  |  |
| 138                  | 194                                | 235                   |  |  |  |  |  |  |
| 211                  | 299                                | 358                   |  |  |  |  |  |  |
| 289                  | 412                                | 490                   |  |  |  |  |  |  |
| 412                  | 579                                | 698                   |  |  |  |  |  |  |
| 559                  | 785                                | 941                   |  |  |  |  |  |  |
| 711                  | 1000                               | 1198                  |  |  |  |  |  |  |
| 1049                 | 1481                               | 1775                  |  |  |  |  |  |  |

Button Head

Cap Head Countersunk Head

Hex Head Bolt











(UK)

GEDORE Torque Ltd. Tannery Lane, Gosden Common Bramley, Guildford, Surrey GU5 0AJ

Sales Hotline +44 (0) 1483 894476 Telephone +44 (0) 1483 892772 Fax +44 (0) 1483 898536 salesandrepairs@gedore-torque.com www.gedore-torque.com

**Brands of the GEDORE Group** gedore-torque.com · carolus.de · ochsenkopf.com

formerly TORQUELEADER