



**Sturtevant
Richmont**

2018 Catalog



**ISO 17025 Accredited
ISO 9001 Registered**

**Accurate. Reliable. Durable.
Tools You Trust.**

Spreading Technology Across a Wider Base



High production industries, by their very nature, have always had the need, and the resources to invest in advancing assembly technology. This has driven our commitment to wireless error proofing.

When engineers first see our wireless offerings, we typically hear the comment, "This is a human powered DC tool, only much better!"

Whether your MES is driven via the Ethernet or 24 VDC Inputs and Outputs, we have engineered wireless error proofing solutions, by bringing hand tools into the digital world.

Explore our wireless error proofing systems and see how the technology we've developed can bring advances to your quality while cutting rework and increasing throughput.

We Systematically Make Complex Assembly Challenges Simple.

Our systems approach to wireless error proofing attacks the challenge from three separate angles:

Error Proofing by Design

We design tools to eliminate human influence on the application process. Our flattened case prevents side-loading, which causes inaccurate torque application.

Error Proofing by Guidance

Our tools and controllers combine to inform the operator with visual, auditory, and tactile guidance on each fastening. Color, tone, vibration all keep the operator focused on task.

Error Proofing by Behavior Modification

Our system prevents operators from using the wrong tool, making inadvertent changes at the tool level, and more. Our engineers design systems that anticipate where a process might go off track, and then create design elements that prevent that.

ISO is the Cornerstone of Error Proofing

Sturtevant Richmond was one of the early adopters of ISO 9001 and ISO 17025. As the American representative on the working committees that write the ISO standards, our focus is reproducible results, worldwide, through process control.

ISO 9002 Registered August 19, 1994 | ISO 9001 Registered May 8, 2001 | ISO 17025 Accredited October 23, 2003



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Accurate. Reliable. Durable.
Tools You Trust.



Join us on the leading edge of innovation:

Wireless Error Proofing for Hand Tools



Traditional thinking put a price on quality. We believe quality is its own profit center affecting every aspect of the business.

Our wireless torque controllers and radio equipped tools take error proofing to a new level.

We took analog hand tools into the digital world. We teamed them with intuitive, easy to use, focused controllers. This offers amazing flexibility and the control to create a more robust manufacturing process to drive cost out and profitability up.

ALL of our controllers provide instantaneous OK/NOK results thru 24 VDC interaction with your assembly line controls.

Our TCV can work with two "click" tools, simultaneously for right/left side applications.

The PTV provides a single operator with up to four "click" tools to accomplish their assembly tasks.

The Global 8 is our original network enabled controller that is available in multiple assembly protocols. The Global 8 works with up to 8 tools, one at a time. "Click" wrenches, digital wrenches, and pneumatic tools can all be connected to our Global 8.

The Global 400 Series offers unparalleled power over 32 tools, to control your assembly processes while providing complete documentation of results. It handles simultaneous network communication, in multiple protocols, making it easy to integrate with state of the art assembly systems. Or it is powerful enough to stand alone as your system.

The latest entry into our Global Series is the new Global 400mp. We have literally put four controllers in one, allowing four operators to complete assembly tasks, independent of each other.

Both the Global 400 and 400mp are empowered to work with our patent applied for holding tool (back-up tool) technology. Designed specifically for accurate placement and installation of hydraulic or fuel connections. Stopping leaks before they start has never been so easy.

In 1999 we pioneered wireless hand tool integration into modern assembly. Today customers buy those wireless solutions because they still solve assembly problems. The new Global 400 series provide assembly control of tools and processes that were previously unimagined. Contact Sturtevant Richmond to explore what our engineering minds can do for you.



Wireless Error Proofing

Simple to Sophisticated Wireless Error Proofing Assembly Solutions

Since we started the wireless error proofing industry in 1999 we have created a variety of solutions based on customer need and input

Controllers



Compatible System Wrenches & Tools



Controller Interfaces





Torque Controller System Global 400

Series

System Capabilities:

- Six inch diagonal, back-lit, color LCD display 2-RJ-45 Ethernet ports allow for chain, or ring network communication.
- USB-A connector for use with bar code scanner, or updating firmware, and saving files.
- RS-232 D-Sub9 Connector for use with serial bar code scanner or serial printer.
- Ten pin I/O connector providing discreet I/O capabilities.
- Five pin connector for the additional I/O capabilities of the optional GIM400.
- Power Supply 100-240 VAC at 50-60 Hz.
- Key switch for programming access. 21-function keys for programming.
- Adjustable and programmable beeper for audio communication.

Protocols: EtherNet IP, Open Protocol, ToolsNet,

Software: SR Global Manager (Included) optional SR GlobalHost reporting software (Part No. 10622)

Order Global 400, Part No. 10497

Enhance your controller with our GIM400 Global Input/Output Multiplier, part number 10611. For more information see page 11.



Mixed Model Manufacturing Mandates Flexibility:

We specialize in solving the most complex assembly challenges. The Global 400 is designed to organize work stations where highly customized products are assembled. It can work with 16 primary torque tools, 8 holding tools, and an additional 8 I/O tools. It has the capacity for 100 sets of parameters that can be grouped allowing 4 operators to work as a team. These parameters or groups can be formed into jobs containing a fixed build sequence of up to 35 steps.

Mixed Model Manufacturing Mandates Communication:

The Global 400 communicates with the operators, the tools, and your network in multiple ways. Parameters or jobs can be assigned via the Ethernet or by the operator via a bar code scanner. Tools can be selected or programmed wirelessly, while the controller displays the required work to the operator. As the operator works through their task, the tools and controller provide auditory, tactile, and visual guidance. The tools provide the controller with immediate notification of operator results. The controller stores up to 10,000 results in on-board memory, and automatically updates your production system via multiple protocols. No production interruptions!



Multi-Port Torque Controller System Global 400mp

Series

The mp Takes You To The Next Level:

The Global 400mp distributes all the power, flexibility, ease and capabilities of the Global 400 over four (4) individual network interfaces. The result? Up to four (4) operators can work independently and don't even have to be in the same work cell.

Four separate network interfaces and Global 400mp architecture eliminate the need for groups in order to support simultaneous work.

Parameters are formed directly into jobs. With 4 network interfaces each operator can work on their own job, independent of the other operators.

The Global 400mp can be applied to assembly, repair, and maintenance operations.

The Global 400mp works with up to 16 torque tools, 8 holding tools and 8 I/O tools divided among the 4 network interfaces.



Flexible, multi-tool control including wireless connectivity to our Exacta line of digital wrenches, SLTC-FM wireless torque wrenches, and HT Series holding tools, and wired connectivity with our SLTC hardwired wrenches, and PST-1200 pneumatic sensor transceiver.



System Capabilities:

- Six inch diagonal, back-lit, color LCD display
- 2-RJ-45 Ethernet ports allow for chain, or ring network communication.
- USB-A connector for use with bar code scanner, or updating firmware, and saving files.
- RS-232 D-Sub9 connector for use with serial bar code scanner or serial printer.
- Ten pin I/O connector providing discreet I/O capabilities.
- Five pin connector for the additional I/O capabilities of the optional GIM400.
- Power Supply 100-240 VAC at 50-60 Hz.
- Key switch for programming access. 21-function keys for programming.
- Adjustable and programmable beeper for audio communication.

Protocols: EtherNet IP, Open Protocol, ToolsNet,

Software: SR Global Manager (Included) optional SR GlobalHost reporting software (Part No. 10622)

Order Global 400mp, Part No. 10612



Quick Guide



Global 400 and Global 400mp Tools & Accessories

Our wireless tools and torque controllers are designed to make error proofing fast, easy, and provide a remarkably fast return on investment.

We built these systems with the focus on error proofing and data capture to provide digital date and time stamped documentation for hand tools. Customers also found that their throughput increased and as a result the ROI was even faster than anticipated.

These systems work together, providing error proofing by design, by guidance, and by changing and reinforcing positive behavior. From a simple I/O driven OK/NOK to the highly sophisticated network interfaces, Sturtevant Richmond error proofing has the right solution for you.

1250 Series Exacta 2 Digital Torque & Angle Page 8



Part No.	Model	Capacity	Head
10652	1250 Series Exacta 2 - 25	25 ft lb/33.8 Nm	Dovetail
10653	1250 Series Exacta 2 - 75	75 ft lb/101.5 Nm	Dovetail
10654	1250 Series Exacta 2 - 150	150 ft lb/203.3 Nm	Dovetail
10659	1250 Series Exacta 2 - 250	250 ft lb/338.9 NM	Dovetail
10655	1250 Series Exacta 2 - 250 R	250 ft lb/338.9 Nm	1/2" SD Ratchet
10656	1250 Series Exacta 2 - 400	400 ft lb/542 Nm	Dovetail
10671	1250 Series Exacta 2 - 400 R	400 ft lb/542 Nm	3/4" SD Ratchet
10657	1250 Series Exacta 2 - 600 R	600 ft lb/813 Nm	3/4" SD Ratchet
10666	1250 Series Exacta 2 - 25 QC	25 ft lb/33.8 Nm	Quick Change
10667	1250 Series Exacta 2 - 75 QC	75 ft lb/101.5 Nm	Quick Change
10668	1250 Series Exacta 2 - 150 QC	150 ft lb/203.3 Nm	Quick Change
10669	1250 Series Exacta 2 - 250 QC	250 ft lb/338.9 Nm	Quick Change

1200 Series Exacta 2 Digital Torque Wrench Page 10



Part No.	Model	Capacity	Type
10646	1200 Series Exacta 2 - 25	25 ft lb / 33.8 Nm	Dovetail
10647	1200 Series Exacta 2 - 75	75 ft lb / 101.5 Nm	Dovetail
10648	1200 Series Exacta 2 - 150	150 ft lb / 203.3 Nm	Dovetail
10658	1200 Series Exacta 2 - 250	250 ft lb / 338.9 Nm	Dovetail
10649	1200 Series Exacta 2 - 250 R	250 ft lb / 338.9 Nm	1/2" SD Ratchet
10650	1200 Series Exacta 2 - 400	400 ft lb / 542 Nm	Dovetail
10670	1200 Series Exacta 2 - 400 R	400 ft lb / 542 Nm	3/4" SD Ratchet
10651	1200 Series Exacta 2 - 600 R	600 ft lb / 813 Nm	3/4" SD Ratchet
10662	1200 Series Exacta 2 - 25 QC	25 ft lb / 33.8 Nm	Quick Change
10663	1200 Series Exacta 2 - 75 QC	75 ft lb / 101.5 Nm	Quick Change
10664	1200 Series Exacta 2 - 150 QC	150 ft lb / 203.3 Nm	Quick Change
10665	1200 Series Exacta 2 - 250 QC	250 ft lb / 338.9 Nm	Quick Change

HT Holding Tool Technology Wrenches Page 12



Part No.	Model	Length
810673	HTS 13"	13" / 33.02 cm
810674	HTL 20"	20" / 50.8 cm

SLTC-FM 2.4 GHz Wireless Torque Wrench Page 15



Part No.	Model	Torque Capacity*	Head
810411	SLTC FM 2.4 A3 50 I	50 in lb / 6 Nm	Dovetail
810412	SLTC FM 2.4 A3 150 I	150 in lb / 17 Nm	Dovetail
810413	SLTC FM 2.4 A3 300 I	300 in lb / 34 Nm	Dovetail
810410	SLTC FM 2.4 A3 300 I OHT	300 in lb / 34 Nm	Dovetail
810414	SLTC FM 2.4 A3 750 I	750 in lb / 85 Nm	Dovetail
810415	SLTC FM 2.4 A3 1800 I	1800 in lb / 204 Nm	Dovetail
810421	SLTC FM 2.4 A3 1800 I ERGO	1800 in lb / 204 Nm	Dovetail
810420	SLTC FM 2.4 A3 3000 I	3000 in lb / 339 Nm	Dovetail
810417	SLTC FM 2.4 A3 3600 I	3600 in lb / 408 Nm	Dovetail
810418	SLTC FM 2.4 A3 4800 I	4800 in lb / 542 Nm	Dovetail
810423	SLTCR FM 2.4 A3 750 I	750 in lb / 84.73 Nm	3/8" SD Ratchet
810424	SLTCR FM 2.4 A3 1800 I	1800 in lb / 203.73 Nm	1/2" SD Ratchet
810425	SLTCR FM 2.4 A3 1800 I ERGO	1800 in lb / 203.73 Nm	1/2" SD Ratchet
810416	SLTCR FM 2.4 A3 3000 I	3000 in lb / 339 Nm	1/2" SD Ratchet
810419	SLTCR FM 2.4 A3 7200 I	7200 in lb / 813 Nm	3/4" SD Ratchet

SLTC Hardwired Torque Wrench Page 18



Part No.	Model	Capacity	Head
810854	SLTC 150 I	150 in. lb. / 17 Nm	Dovetail
810855	SLTC 300 I	300 in. lb. / 34 Nm	Dovetail
810856	SLTC 750 I	750 in. lb. / 85 Nm	Dovetail
810857	SLTC 1800 I	1800 in. lb. / 204 Nm	Dovetail
810858	SLTC 3600 I	3600 in. lb. / 408 Nm	Dovetail
810859	SLTCS 7200 I	7200 in. lb. / 813 Nm	3/4" SD
810860	SLTCR 7200 I	7200 in. lb. / 813 Nm	3/4" SD Ratchet

PST 1200 Pneumatic Sensor Transceiver Page 13



Part No.	Model	Description
10514	PST 1200 BATT	PST 1200 Pressure Sensor Transceiver Battery Power
10515	PST 1200 Hardwired	PST 1200 Pressure Sensor Transceiver Hardwired

GIM 400 Page 11



Part No.	Model
10611	Global Input/Output Multiplier

GSM 400 Page 11



Part No.	Model
10613	Global Bar Code Scanner Manager

SR GlobalHost Reporting Software



Part No.	Model
10622	SR GlobalHost Software



Over 100 interchangeable heads to choose from without changing torque values. Simply slide the heads on and "lock on quality".



1250 SERIES EXACTA® 2

Digital Torque & Angle Wrench



- Bi-directional +/- 1% Indicated Value from 20% to 100% of tool capacity.
- Meets/Exceeds the ASME and ISO standards.
- Angle measurements include: Torque To Angle, Torque With Angle Monitoring, Residual Torque, Prevailing Torque Mode.
- Also operates in Peak Mode with no angle measurements
- Included with the 1250 Series wrenches are two single cartridge batteries and charger. One battery can be charging while the other is in use.
- Vibrating handle when the target torque and angle values are reached.
- Programmable wrench display “lighting sequence” works with both torque and angle. Within the engineering specifications, a target can be set to acknowledge target achieved feedback with display color change and handle vibration.
- Up to four tools can operate simultaneously with the Global 400/400mp.
- Robust radio communication speeds support the shortest takt times.
- Operator can complete active P-Set even if radio communication is severed.
- When radio communication resumes, the wrench automatically uploads all missed P-Set data.
- The wrench automatically recalibrates for P-Sets requiring different head lengths.
- Wrenches are available with our traditional fixed ratchet, pin/spring dovetail, optional quick change (QC) dovetail with access to well over 100 interchangeable heads

Compatible Products

Fully compatible with Global 400 and Global 400mp controller where multiple tools with simultaneous uses are needed. The 1250 Series Exacta 2 does not communicate with the Global 8, PTV or TCV.

Why Torque and Angle?

Torque with angle measurement provides a significantly more accurate and repeatable clamp load from one assembly to the next.

Traceability and Digital Data Capture

Provides digital date/time stamped documentation on every fastening achieved with our wireless tools.

The 1250 Series measures torque in:
cNm, Nm, cmkg, In lb, and ft lb



Five Operational Modes:

Torque to Angle: T2A

Measures torque first and then degrees of fastener rotation to stretch the fastener a predetermined amount. That closely managed bolt stretch creates greater repeatability than using torque alone.

Torque with Angle Monitoring: TAM

Measures torque while ensuring sufficient rotation. Helps identify “double-tightened” fasteners and changing joint conditions.

Prevailing Torque Mode: PTM

Factors out friction inherent to lock nuts.

Residual: RES

Audit torque value on previously tightened fasteners with greater accuracy.

Peak

Pure torque measurement without angle measurement.

1250 Series Exacta 2 Digital Torque and Angle Wrenches

Part No.	Model Designation	Capacity	Head Style	Lever Length	Overall Length	Weight
10652	1250 Series Exacta 2 - 25	25 ft lb	Dovetail	12.5"/317mm	16.1"/409mm	2.8 lb/1.27 kg
10653	1250 Series Exacta 2 - 75	75 ft lb	Dovetail	15.8"/401mm	19.4"/493mm	3.0 lb/1.36 kg
10654	1250 Series Exacta 2 - 150	150 ft lb	Dovetail	17.8"/452mm	21.5"/546mm	3.1 lb/1.40 kg
10659	1250 Series Exacta 2 - 250	250 ft lb	Dovetail	21.2"/538mm	23.0"/584mm	4.1 lb/1.86 kg
10655	1250 Series Exacta 2 - 250 R	250 ft lb	1/2" SD Ratchet	20.8"/527mm	25.0"/634mm	4.1 lb/1.86 kg
10656*	1250 Series Exacta 2 - 400	400 ft lb	Dovetail	35.9"/912mm	35.2"/895mm	7.7 lb/3.49 kg
10671	1250 Series Exacta 2 - 400 R	400 ft lb	3/4" SD Ratchet	33.7"/856mm	38.3"/973mm	7.7 lb/3.49 kg
10657	1250 Series Exacta 2 - 600 R	600 ft lb	3/4" SD Ratchet	55.1"/1399mm	59.7"/1519mm	13.0 lb/5.90 kg
10666	1250 Series Exacta 2 - 25 QC	25 ft lb	Quick Change	12.5"/317mm	16.1"/409mm	2.8 lb/1.27 kg
10667	1250 Series Exacta 2 - 75 QC	75 ft lb	Quick Change	15.8"/401mm	19.4"/493mm	3.0 lb/1.36 kg
10668	1250 Series Exacta 2 - 150 QC	150 ft lb	Quick Change	17.8"/452mm	21.5"/546mm	3.1 lb/1.40 kg
10669	1250 Series Exacta 2 - 250 QC	250 ft lb	Quick Change	21.0"/533mm	25.2"/640mm	4.1 lb/1.86 kg

Lever Length and Overall Length

The lever length on models up to 250 are based on 1 7/16" or 36.5mm head length.

*Lever length for the 10656 is based on a 3 7/8" or 98.4mm head length.



1250 Series Exacta 2 Digital Torque Wrench Batteries and Chargers

Part No.	Model Designation	Capacity
10674	Kit, Two Battery Packs and One Charger	N/A
10673	Battery Pack Charger, NiMH	Fast charge with built in circuitry protection against over charging.
10672	Battery Pack, NiMH	3.6V, 2.1 Ah

*Use ONLY the Sturtevant Richmond specified NiMH battery cartridge.

1200 SERIES EXACTA[®] 2

Digital Torque Wrench



The 1200 Series Exacta has all the features and characteristics of the 1250 with these exceptions:

- Uses 4 AA NiMH Rechargeable batteries (Batteries not included)
- Non-vibrating handle
- Torque measurement only

Accuracy, reliability, durability are the same as the 1250 Series Exacta 2.



The 1200 Series Exacta 2 radio speed is 10x that of the 1100 Series Exacta 2.

The 1200 Series measures torque in: cNm, Nm, cmkg, In lb, and ft lb



Over 100 interchangeable heads to choose from without changing torque values. Simply slide the heads on and "lock on quality".

1200 Series Exacta 2 Digital Torque Wrenches

Part No.	Model	Capacity	Head Type	Lever Length	Overall Length	Weight
10646	1200 Series Exacta 2 - 25	25 ft lb/33.8Nm	Dovetail	12.5"/317mm	16.1"/409mm	2.8 lb/1.27 kg
10647	1200 Series Exacta 2 - 75	75 ft lb/101.5Nm	Dovetail	15.8"/401mm	19.4"/493mm	3.0 lb/1.36 kg
10648	1200 Series Exacta 2 - 150	150 ft lb/203.3Nm	Dovetail	17.8"/452mm	21.5"/546mm	3.1 lb/1.40 kg
10658	1200 Series Exacta 2 - 250	250 ft lb/338.9Nm	Dovetail	21.2"/538mm	23.0"/584mm	4.1 lb/1.86 kg
10649	1200 Series Exacta 2 - 250 R	250 ft lb/338.9Nm	1/2" SD Ratchet	20.8"/527mm	25.0"/634mm	4.1 lb/1.86 kg
10650*	1200 Series Exacta 2 - 400	400 ft lb/542Nm	Dovetail	35.9"/912mm	35.2"/895mm	7.7 lb/3.49 kg
10670	1200 Series Exacta 2 - 400 R	400 ft lb/542Nm	3/4" SD Ratchet	33.7"/856mm	38.3"/973mm	7.7 lb/3.49 kg
10651	1200 Series Exacta 2 - 600 R	600 ft lb/813Nm	3/4" SD Ratchet	55.1"/1399mm	59.7"/1519mm	13.0 lb/5.90 kg
10662	1200 Series Exacta 2 - 25 QC	25 ft lb/33.8Nm	Quick Change	12.5"/317mm	16.1"/409mm	2.8 lb/1.27 kg
10663	1200 Series Exacta 2 - 75 QC	75 ft lb/101.5Nm	Quick Change	15.8"/401mm	19.4"/493mm	3.0 lb/1.36 kg
10664	1200 Series Exacta 2 - 150 QC	150 ft lb/203.3Nm	Quick Change	17.8"/452mm	21.5"/546mm	3.1 lb/1.40 kg
10665	1200 Series Exacta 2 - 250 QC	250 ft lb/338.9Nm	Quick Change	21.0"/533mm	25.2"/640mm	4.1 lb/1.86 kg

Lever Length and Overall Length

The lever length on models up to 250 are based on 1 7/16" or 36.5mm head length.

*Lever length for the 10650 is based on a 3 7/8" or 98.4mm head length.

NiMH Batteries rated 1400 mAh to 2400 mAh are acceptable. Higher mAh ratings mean more cycles between recharge and longer recharge times. Use only NiMH AA rechargeable batteries in the 1200 Series Exacta 2 wrenches. Other batteries will damage the wrench and void the warranty.

We build highly durable tools with sophisticated electronics. We design circuits to be as energy efficient as possible. We are also concerned about the environment.

Our tool and tester circuit boards are designed on the highly consistent 1.2 volt power curve provided by rechargeable NiMH batteries. Other batteries like Alkaline or Lithium batteries provide 1.5 volts in the power curve. The additional voltage will damage the circuit board.

GIM400

Global Input/Output Multiplier



The GIM400 is a very flexible accessory for the Global 400 and Global 400mp. It is virtually a Windows-based PLC that can be configured using the Global Manager Freeware that is included with every controller. It can be configured to provide 24 VDC to power the 16 I/O. By adding an additional 3 GIM400 a total of 64 I/O is possible.

A single GIM 400 can also be configured to connect with a PLC in a binary fashion, providing up to 100 I/O.

A serial bus cable along with all the appropriate Phoenix connectors are provided with the GIM400.

Compatible with the Global 400 (Part No. 10497) and Global 400mp (Part No. 10612).

Order the GIM400 using part number 10611.



GSM400

Global Bar Code Scanner Manager

The GSM400 is a perfect accessory to the Global 400mp. Powered off the USB port (on the side of the Global 400mp) it allows connection for up to four (4) serial barcode scanners. Each scanner can be assigned to a network interface and the GSM keeps the scanner and interface paired.

Compatible with the Global 400mp (Part No. 10612).

Order the GSM400 using part number 10613.



Holding Tool Technology Wrenches

HT

SERIES



Stop Hydraulic Leaks Before They Start

Engineers with hydraulic assemblies immediately recognize the value this tool brings to their assembly quality.

Simple Solution to a Complex Problem

Applications involving hydraulic hoses, and or, hydraulic connections, require a counter torque reaction tool. When these tools are not used hoses can be twisted and or, connectors can be misaligned, creating rework or increased warranty costs.

The SR solution is to ensure both torque wrench and back up tool are used during the fastening operation.

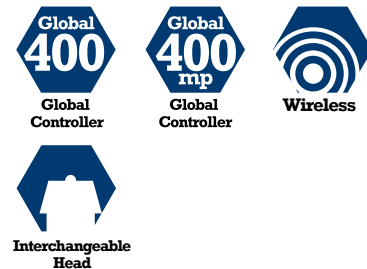
At the P-Set level, holding (back-up) tools are paired to the primary torque wrench. The back-up tool must be engaged prior to, during, and after the torque tool is used.

No Drips, No Runs, No Errors!

Using thrust force to activate the holding (back-up) wrench is similar to using a screwdriver. This helps focus the operator to hold the hose or the connector in a static position while the torque wrench applies the torque.



Part No.	Model	Weight	Length
810673	HTS 13"	1.9 lbs. / .86 kg	13" / 33.02 cm
810674	HTL 20"	4.9 lbs. / 2.22 kg	20" / 50.8 cm



PST 1200 & PST 2000

Pressure Sensor Transceivers



There are a variety of pneumatic torque controlled tools that accommodate high speed assembly. The very nature of high speed assembly creates opportunities for errors. Operators moving too fast can miss tightening some fasteners, attempt to tighten previously tightened fasteners, cross-thread, or release the trigger before final torque is achieved.

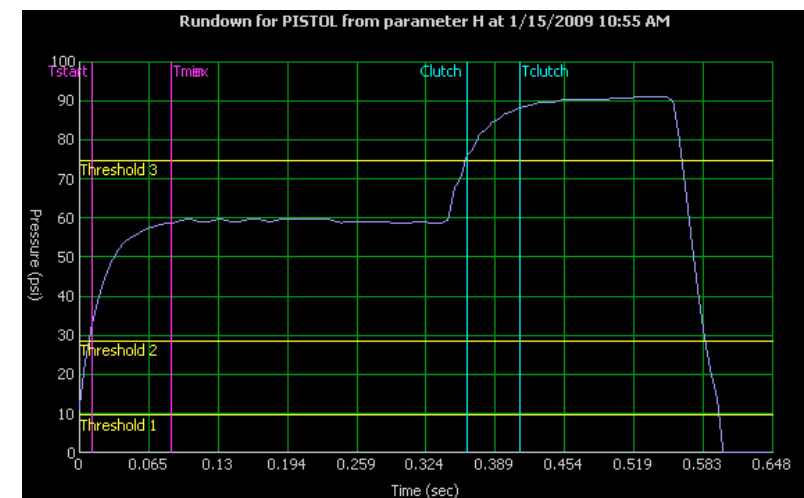
The PST, in conjunction with the Global controller can:

- Batch count to ensure all fasteners achieved target torque
- Identify previously tightened fasteners that are attempted again
- Be set to identify cross threaded fasteners at installation
- Identify premature "clutch out" when the operator releases the tool trigger or lever prior to target torque

The PST Series works with most trigger or lever activated, ported torque sensing power tools. Whether a continuous drive, or shut-off pulse tool, the PST monitors air pressure in the motor compartment while applying timers to the various stages of the "run down." This algorithm is created during the auto-cal process and is used to validate or reject all fastenings performed by that tool.

The PST Pressure Sensor Transceivers will provide a more robust assembly process from your pneumatic tools.

For more information contact the factory worldwide: +1.847.455.8677 (between 0730 and 1600 CST) or go to www.srtorque.com/error-proofing-tools/pst-series-pneumatic-transceiver-sensors/



Part No.	Model	Description
10514	PST 1200 BATT	PST 1200 Pressure Sensor Transceiver Battery Power
10515	PST 1200 Hardwired	PST 1200 Pressure Sensor Transceiver Hardwired
10499	PST 2000 BATT	PST 1200 Pressure Sensor Transceiver Battery Power
10498	PST 2000 Hardwired	PST 1200 Pressure Sensor Transceiver Hardwired
21689	PST Power Extension Cable (5 meters)	

PST 1200



PST 2000



TCV-FM 2.4 GHz

Torque Control Verifier

I/O driven, the TCV is ideal where accuracy and repeatability are needed. Batch count can be performed by PLC.

- New Feature! Two SLTC FM-2.4 GHz wrenches can be used simultaneously with the TCV. Double your production or throughput.
- Immediately informs operator via lights and a buzzer of proper ("Accept") or improper ("Reject") wrench use
- 5 pin connector for use with 24 VDC I/O system
- Device Programmer software is included with each TCV and allows the ability to assign the purpose of the outputs

- Easily program tool use specifications through the USB port with supplied software
- Operates on either 110-120 VAC or 220-240 VAC power
- See page: 15 for SLTC FM 2.4 GHz wrench information.

Order the TCV-FM 2.4 GHz using part number 10467.



PTV-FM 2.4 GHz

Programmable Torque Verifier

The PTV is our oldest and most popular controller. The PTV is capable of managing 4 parameter sets. Each parameter is paired with a specific wrench. If the operator selects the wrong wrench, communication is ignored until the correct wrench is used.

This is the first, and principle hall mark of all SR tool controllers. The right tool, at the right time ensures accuracy of the assembly operation.

- Immediately informs operator via lights and a buzzer of proper ("Accept") or improper ("Reject") wrench use
- Notifies operator and line when batch is complete
- Allows up to 255 fasteners per batch. Counts fasteners in batch in either direction: up or down
- Cycle accept, cycle reject, batch complete, and reset relays for use with line control system

- Simple and straightforward front panel programming with key lock security control.
- Control tool use sequencing through the unit or via 24 VDC control system
- Operates on either 110-120 VAC or 220-240 VAC power
- See page 15 for SLTC FM 2.4 GHz wrench capacities and part numbers.

Order the PTV-FM 2.4 GHz using part number 10466.



SLTC FM 2.4 GHz Preset Wireless Click Wrench

SLTC-FM

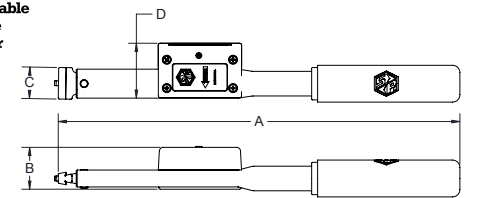
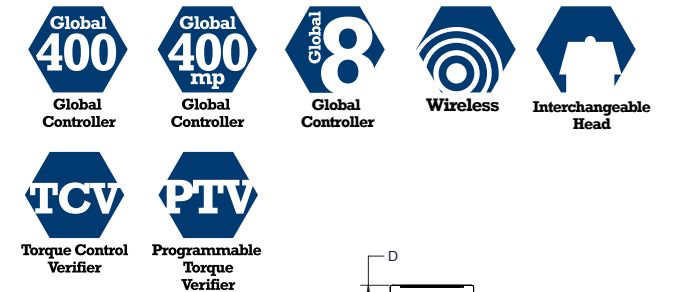
Series

- Full compatibility with all Global 8, Global 400 and Global 400mp, TCV, TCV-Ethernet, and PTV.
- Accuracy of +/- 4% or better of preset value from 20% to 100% of capacity meets or exceeds requirements of ASME B107.300-2010 and ISO 6789.
- Access to well over 100 SR interchangeable heads.
- Excellent audible/tactile impulse when preset torque is achieved.
- Error Proofing By Guidance: Monitors time in the "clicked" position to provide "OK/NOK" quality attribute data with every use of the tool.
 - o Too little time in the clicked position means the tool was likely "jerked", resulting in over-torque.
 - o Correct time in the clicked position means the tool was used properly to transmit the preset torque correctly to the fastener.
 - o Too much time in the clicked position means the tool was likely pulled past the click and excess torque was applied to the fastener.

Tool power supply is a AAA battery. An Alkaline battery is supplied with the tool. We recommend NiMH rechargeable batteries for high cycle operations and environmental friendliness.

Previous models were powered by a 6 volt Alkaline battery. Those tools can be upgraded with the current AAA power supply and radio kit.

To order your AAA upgrade kit use part number Part No. 10615 for all models up to and including the 1800 I ERGO model. For wrenches 3000 I and larger use Part No. 10616.



Part No.	Model	Torque Capacity*	Head	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs.)
810411	SLTC FM2.4 50 I	50 in lb / 6 Nm	Dovetail	6 15/16	1 39/64	15/16	1 47/64	0.5
810412	SLTC FM2.4 150 I	150 in lb / 17 Nm	Dovetail	6 15/16	1 21/64	15/16	1 47/64	0.5
810413	SLTC FM2.4 300 I	300 in lb / 34 Nm	Dovetail	8 69/64	1 21/64	15/16	1 47/64	0.5
810410	SLTC FM2.4 300 I OHT	300 in lb / 34 Nm	Dovetail	7 1/8	1 21/64	15/16	1 47/64	0.5
810414	SLTC FM2.4 750 I	750 in lb / 85 Nm	Dovetail	12 3/4	1 21/64	1	1 47/64	0.5
810415	SLTC FM2.4 1800 I	1800 in lb / 204 Nm	Dovetail	16 3/16	1 21/64	1 1/4	1 47/64	1.3
810421	SLTC FM2.4 1800 I ERGO	1800 in lb / 204 Nm	Dovetail	20 9/16	1 21/64	1 1/4	1 47/64	1.3
810420	SLTC FM2.4 3000 I	3000 in lb / 339 Nm	Dovetail	20 81/64	1 81/64	1 1/2	1 49/64	4.9
810417	SLTC FM2.4 3600 I	3600 in lb / 408 Nm	Dovetail	24 11/32	2 3/4	2 9/32	2 9/32	5.5
810418	SLTC FM2.4 4800 I	4800 in lb / 542 Nm	Dovetail	34 11/32	2 9/32	2	2 11/16	8.3
810423	SLTCR FM2.4 750 I	750 in lb / 84.73 Nm	3/8" SD Ratchet	14 23/64	1 21/64	1 3/8	1 47/64	1.3
810424	SLTCR FM2.4 1800 I	1800 in lb / 203.73 Nm	1/2" SD Ratchet	18 21/64	1 21/64	1 81/64	1 47/64	1.8
810425	SLTCR FM2.4 1800 I ERGO	1800 in lb / 203.73 Nm	1/2" SD Ratchet	22 45/64	1 21/64	1 81/64	1 47/64	1.8
810419	SLTCR FM2.4 7200 I	7200 in lb / 813 Nm	3/4" SD Ratchet	37 3/8	2 11/16	2 11/16	2 9/32	10.0

Torque Controller System Global 8

Series

Global 8 process monitors work with up to eight PST 2000 ported torque sensing power tools, 1100-Series Exacta® 2 digital torque wrenches, 2.4 GHz preset torque wrenches — in any combination.

A large and readily visible display ensures the operator is aware of the status of each tightening, the progress through each batch of fastenings, the correct tool for the currently active fastener, and other information required to perform proper fastening.

The Global 8-Ethernet process monitors all have Ethernet ports, and one of the four available communication protocols pre-installed at the factory. Available protocols include: Open Protocol, Ethernet IP, PFCS, and ToolsNet. The lower display and keypad provide a Human-Machine Interface for programming elements of the communication.

Further, these units all have relays and a port for connection to your 24 VDC control system, and are capable of fixed or variable sequencing if desired.

When multiple tools of multiple types, or many tools of the same type must be used at a single cell or station, one of the Global 8-Ethernet family of process monitors is likely the optimum process monitor for that location.

System Capabilities:

- The Global 8 Controller works with up to 8 tools in any combination of SLTC FM 2.4 GHz preset click wrenches, 1100 Series Exacta 2 digital torque wrenches, or ported pneumatic tools equipped with the PST 2000.
- Integrates 1100-Series Exacta® 2 Digital Torque Wrenches
- Integrates PST 2000 Pressure Sensor/Transceiver for ported torque sensing power tools.
- Integrates 2.4 GHz Wireless Preset Torque Wrenches
- Manages and communicates variable torque data
- Manages and communicates attribute torque data
- Downloads specifications to tools
- Performs task sequencing
- Accepts task sequencing from external commands
- Display shows current tool and current tightening status
- LED's for Cycle Accept, Cycle Reject, and Batch Accept
- 10-Pin I/O port for 24 VDC signals and relays
- Beeper augments visual communication
- Soft key programming on front panel or via free Tool Manager software.
- Global 8 models with Ethernet; Open Protocol, ToolsNet, and PFCS are equipped with two serial ports for use with barcode scanner and serial printer.

Part No.	Model	Description
10473	Global 8 Ethernet IP	Global 8 Process Monitor with Ethernet card and Ethernet IP
10476	Global 8 PFCS	Global 8 Process Monitor with Ethernet card and PFCS
10477	Global 8 Open Protocol	Global 8 Process Monitor with Ethernet card Open Protocol
10479	Global 8	Global 8 Process Monitor with No Ethernet card
10494	Global 8 ToolsNet	Global 8 Process Monitor with Ethernet card and ToolsNet



1100 SERIES EXACTA® 2

Digital Torque Wrench

The 1100 Series Exacta 2 is designed for one tool at a time operation and works with the Global 8.

Bi-directional +/- 1% Indicated Value Accuracy from 20% to 100% of capacity, both CW and CCW.

Meets or exceeds requirements of ASME B107.300-2010 and ISO 6789.

Yellow/Green/Red color scheme informs the operator of tightening status - regardless of tool orientation!

If you need a basic digital torque wrench for one tool at a time usage, this is the tool for that application.



Over 100 interchangeable heads to choose from without changing torque values. Simply slide the heads on and "lock on quality".



Part No.	Model	Torque Capacity	Head	Lever Length	Overall Length	Weight
10581	1100 Series Exacta 2 - 25	25 ft lb / 33.8 Nm	Dovetail	12.5"/317mm	16.1"/409mm	2.8 lb/1.27 kg
10582	1100 Series Exacta 2 - 75	75 ft lb / 101.5 Nm	Dovetail	15.8"/401mm	19.4"/493mm	3.0 lb/1.36 kg
10583	1100 Series Exacta 2 - 150	150 ft lb / 203.3 Nm	Dovetail	17.8"/452mm	21.5"/546mm	3.1 lb/1.40 kg
10578	1100 Series Exacta 2 - 250	250 ft lb / 338.9 Nm	Dovetail	21.2"/538mm	23.0"/584mm	4.1 lb/1.86 kg
10584	1100 Series Exacta 2 - 250 R	250 ft lb / 338.9 Nm	1/2" SD Ratchet	20.8"/527mm	25.0"/634mm	4.1 lb/1.86 kg
10580*	1100 Series Exacta 2 - 400	400 ft lb / 542 Nm	Dovetail	35.9"/912mm	35.2"/895mm	7.7 lb/3.49 kg
10577	1100 Series Exacta 2 - 400 R	400 ft lb / 542 Nm	3/4" SD Ratchet	33.7"/856mm	38.3"/973mm	7.7 lb/3.49 kg
10585	1100 Series Exacta 2 - 600 R	600 ft lb / 813 Nm	3/4" SD Ratchet	55.1"/1399mm	59.7"/1519mm	13.0 lb/5.90 kg
10524	1100 Series Exacta 2 - 25 QC	25 ft lb / 33.8 Nm	Quick Change	12.5"/317mm	16.1"/409mm	2.8 lb/1.27 kg
10525	1100 Series Exacta 2 - 75 QC	75 ft lb / 101.5 Nm	Quick Change	15.8"/401mm	19.4"/493mm	3.0 lb/1.36 kg
10526	1100 Series Exacta 2 - 150 QC	150 ft lb / 203.3 Nm	Quick Change	17.8"/452mm	21.5"/546mm	3.1 lb/1.40 kg
10579	1100 Series Exacta 2 - 250 QC	250 ft lb / 338.9 Nm	Quick Change	21.0"/533mm	25.2"/640mm	4.1 lb/1.86 kg
21259	Charger/four AA NiMH Batteries	1400 mAh				
816261	Four NiMH Batteries	1400 mAh				

Lever Length and Overall Length

The lever length on models up to 250 are based on 1 7/16" or 36.5mm head length. *Lever length for the 10580 is based on a 3 7/8" or 98.4mm head length.

NiMH Batteries rated 1400 mAh to 2400 mAh are acceptable. Higher mAh ratings mean more cycles between recharge and longer recharge times. Use only NiMH AA rechargeable batteries in the 1200 Series Exacta 2 wrenches. Other batteries will damage the wrench and void the warranty.

We build highly durable tools with sophisticated electronics. We design circuits to be as energy efficient as possible. We are also concerned about the environment.

Our tool and tester circuit boards are designed on the highly consistent 1.2 volt power curve provided by rechargeable NiMH batteries. Other batteries like Alkaline or Lithium batteries provide 1.5 volts in the power curve. The additional voltage will damage the circuit board.

SLTC Hardwired

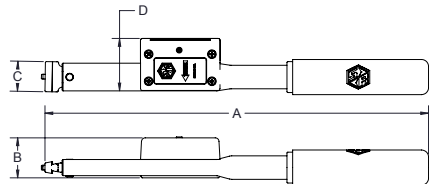
Series

Our Hardwired Preset Clicker-Type Torque Wrenches are based on our industry favorite LTC/LTCR/LTCS line of preset torque wrenches. The SLTC Hardwired wrenches can be connected to a PLC or DC Controller.

- Accuracy of +/- 4% of preset value from 20% to 100% of capacity.
- Meets or exceeds requirements of ASME B107.300-2010 and ISO 6789.
- Five of seven models use the incredibly strong SR dovetail and can be used with any of over 100 SR Interchangeable Heads.
- Tamper-resistant torque setting mechanism design facilitates setting and discourages unauthorized torque setting changes.
- Excellent audible and tactile impulse when preset torque is achieved.

- Light weight and cushion grip provide excellent ergonomics.
- Slender body facilitates use in constrained-access applications.
- Microswitch closes when tool clicks and opens immediately when pressure is released.
- Separate cable with connector (required) facilitates replacement if damaged.
- Rated at 60 VAC/75 VDC at 3 Amperes maximum

Over 100 interchangeable heads to choose from without changing torque values. Simply slide the heads on and "lock on quality".



Part No.	Model	Torque Capacity	Head	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs.)
810854	SLTC 150 I	30 in. lb.-150 in. lb. / 3.4 Nm-17 Nm	Dovetail	6 15/16	3/4	17/32	15/16	0.5
810855	SLTC 300 I	60 in. lb.-300 in. lb. / 6.8 Nm-34 Nm	Dovetail	8 59/64	3/4	17/32	15/16	0.5
810856	SLTC 750 I	150 in. lb.-750 in. lb. / 17.0 Nm-85 Nm	Dovetail	12 55/64	1	17/32	1 7/8	0.5
810857	SLTC 1800 I	360 in. lb.-1800 in. lb. / 40.8 Nm-204 Nm	Dovetail	16 11/64	1 1/4	17/32	1 7/8	1.3
810858	SLTC 3600 I	720 in. lb.-3600 in. lb. / 50.6 Nm-408 Nm	Dovetail	24 21/64	1 3/4	43/64	2	5.5
810859	SLTCS 7200 I	1440 in. lb.-7200 in. lb. / 162.6-813 Nm	3/4" SD	35 3/32	1 1/2	1 29/64	2	7
810860	SLTCR 7200 I	1440 in. lb.-7200 in. lb. / 162.6-813 Nm	3/4" SD Ratchet	37 3/8	2 11/16	1 59/64	2	8
10440	Cable for SLTC	Cable with plug, Switch Wrench, SLTC 150I only, coiled 12' extended						
10421	Cable for SLTC	Cable with plug, Switch Wrench, all SLTC/SLTCS/SLTCR models except 150I, coiled 12' extended						
10442	Cable	For SLTC 150 I Wrench: Right Angle Cable, Switch Wrench to bare end, coiled 12' extended						
10423	Cable	Cable, Switch Wrench to bare end, all SLTC/SLTCS/SLTCR except 150I, coiled 12' extended						
10510	Cable	Straight Cable, no coil, Switch Wrench to bare end. 12' in length.						

Cables are sold separately so you can get the configuration you need for your operation.



Interchangeable Heads

Mixed model manufacturing requires flexible tooling. Our interchangeable head system is the most flexible tooling system found anywhere in the world. Any dovetail head we make will fit on any dovetail wrench we make.

Dovetail vs. Quick Change Wrenches

Dovetail wrenches use our CART tool to change heads. Quick Change versions require only your thumb.

These heads are available on the Exacta 2 1100, 1200, and 1250 Series digital torque wrenches.



Custom Solutions

In addition to our established line of interchangeable heads, SR is proud to offer custom solutions to meet your unique torque needs. For more information on custom interchangeable heads and other solutions please contact SR customer service world wide at +1 847-455-867

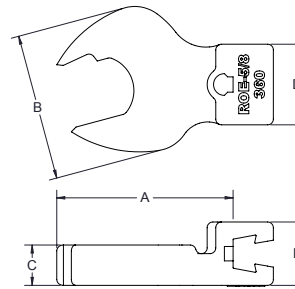


**What is the Common Centerline?
Why is it important?**

<http://www.srtorque.com/resources/understanding-the-common-centerline/>

RATCHETING OPEN END (ROE)

1/16" Common Centerline / 36.5 mm Common Centerline
Slight disengagement from the fastener allows operator to rapidly rotate wrench.

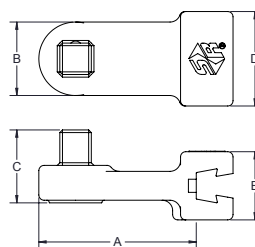


Part No.	Model	Hex Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in. lbs.)
819201	ROE - 5/16	5/16	1 ⁴¹ / ₆₄	3/4	1/4	3/4	1 ¹ / ₁₆	90
819202	ROE - 3/8	3/8	1 ⁵ / ₈	1 ¹ / ₁₆	5/16	3/4	1 ¹ / ₁₆	120
819203	ROE - 7/16	7/16	1 ²³ / ₃₂	1 ¹ / ₁₆	5/16	3/4	1 ¹ / ₁₆	180
819204	ROE - 1/2	1/2	1 ²³ / ₃₂	1 ⁵ / ₁₆	13/32	3/4	1 ¹ / ₁₆	210
819205	ROE - 9/16	9/16	1 ²⁷ / ₃₂	1 ⁵ / ₁₆	13/32	3/4	1 ¹ / ₁₆	240
819206	ROE - 5/8	5/8	1 ²⁷ / ₃₂	1 ¹⁹ / ₃₂	7/16	3/4	1 ¹ / ₁₆	360
819207	ROE - 11/16	11/16	1 ⁷ / ₈	1 ¹⁹ / ₃₂	7/16	3/4	1 ¹ / ₁₆	480
819208	ROE - 3/4	3/4	2	1 ²⁷ / ₃₂	1/2	1	1 ³ / ₁₆	600
819209	ROE - 13/16	13/16	1 ³¹ / ₃₂	1 ²⁷ / ₃₂	1/2	1	1 ³ / ₁₆	750
819210	ROE - 7/8	7/8	1 ³¹ / ₃₂	2 ¹ / ₈	1/2	1 ¹ / ₄	1 ¹³ / ₁₆	900
819211	ROE - 15/16	15/16	1 ⁶¹ / ₆₄	2 ¹ / ₈	13/32	1 ³ / ₁₆	1 ¹ / ₄	1050
819214	ROE - 1 1/8	1 ¹ / ₈	2 ¹⁹ / ₆₄	2 ¹ / ₄	1/2	1 ¹ / ₄	1 ¹ / ₄	1500

Part No.	Model	Hex Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max Torque (Nm)
819220	ROE-10 mm	10	43.18	27.94	7.62	20.32	17.78	13
819221	ROE-11 mm	11	43.18	27.94	7.62	20.32	17.78	20
819222	ROE-12 mm	12	45.72	33.02	7.62	20.32	17.78	23
819223	ROE-13 mm	13	45.72	33.02	7.62	20.32	17.78	23
819224	ROE-14 mm	14	45.72	33.02	7.62	20.32	17.78	27
819225	ROE-15 mm	15	45.72	40.64	7.62	22.86	17.78	27
819226	ROE-16 mm	16	45.72	40.64	7.62	22.86	17.78	40
819227	ROE-17 mm	17	45.72	40.64	7.62	22.86	17.78	54
819228	ROE-18 mm	18	45.72	40.64	7.62	22.86	17.78	54
819229	ROE-19 mm	19	48.26	45.72	10.16	25.4	20.32	68
819231	ROE-22 mm	22	50.8	53.34	10.16	33.02	20.32	101
819232	ROE-24 mm	24	50.8	53.34	10.16	33.02	20.32	118
819233	ROE-27 mm	27	53.34	58.42	12.7	33.02	20.32	152

SQUARE DRIVE (SD)

1/16" Common Centerline / 36.5 mm Common Centerline



Part No.	Model	Drive Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in. lbs.)
819057	SD - 1/4	1/4	1 ³ / ₄	7/8	3/4	5/8	1 ¹ / ₁₆	250
819058	SD - 3/8	3/8	1 ⁷ / ₈	7/8	3/4	5/8	1 ¹ / ₁₆	1250
819059	SD - 1/2	1/2	1 ¹⁵ / ₁₆	1 ⁵ / ₁₆	3/4	5/8	1 ¹ / ₁₆	2500
819119*	SD - 3/4	3/4	5 ⁹ / ₆₄	1 ¹ / ₂	1 ³ / ₄	7/8	1 ¹ / ₁₆	4800

*3/8" Common Centerline / 98.4mm Common Centerline

SQUARE DRIVE RATCHET (SDRT)

1/16" Common Centerline / 36.5 mm Common Centerline

Part No.	Model	Drive Size	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in. lbs.)
809504	SDRT - 1/4	1/4"	1 ⁷ / ₈	1 ³ / ₈	1 ⁵ / ₁₆	3/4	5/8	250
809505	SDRT - 3/8	3/8"	2	1 ¹ / ₂	1 ¹ / ₄	1	9/16	1250
809506	SDRT - 1/2	1/2"	2 ¹ / ₂	1 ³ / ₄	1 ¹ / ₄	1 ¹ / ₄	3/4	2500
809507*	SDRT - 3/4	3/4"	2 ³ / ₈	2	1 ¹ / ₂	1 ¹ / ₂	1	4800

*3/8" Common Centerline / 98.4mm Common Centerline

SMALL RATCHET BODY WITH LARGER DRIVE SIZE

1/16" Common Centerline / 36.5 mm Common Centerline

Part No.	Model	Drive Size	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in. lbs.)
853752	SDRT 1/4 with 3/8 Square Drive	1/4"	1 ⁷ / ₈	1 ³ / ₈	1 ⁵ / ₁₆	3/4	5/8	250
853395	SDRT 3/8 with 1/2 Square Drive	3/8"	2	1 ¹ / ₂	1 ¹ / ₄	1	9/16	1250
809508	SDRT 1/2 with 3/4 Square Drive	1/2"	2 ¹ / ₂	1 ³ / ₄	1 ¹ / ₄	1 ¹ / ₄	3/4	2500

SOCKET LOCK PIN

1/16" Common Centerline / 36.5 mm Common Centerline

Part No.	Model	Drive Size	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in. lbs.)
853304	SDRT 1/4 SOC LOCK PIN	1/4"	1 ⁷ / ₈	1 ³ / ₈	1 ⁵ / ₁₆	3/4	5/8	250
853305	SDRT 3/8 SOC LOCK PIN	3/8"	2	1 ¹ / ₂	1 ¹ / ₄	1	9/16	1250
853548	SDRT 1/2 SOC LOCK PIN	1/2"	2 ¹ / ₂	1 ³ / ₄	1 ¹ / ₄	1 ¹ / ₄	3/4	2500

HOLD & DRIVE SQUARE DRIVE RATCHET (SDRT)

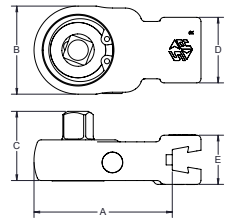
1/16" Common Centerline / 36.5 mm Common Centerline

Part No.	Model	Drive Size	Hole Size (in.)	Hex Key Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in. lbs.)
853619	SDRT-1/4 with 1/8 hole	1/4"	1/8	3/32	1 ⁷ / ₈	1 ³ / ₈	1 ⁵ / ₁₆	3/4	5/8	250
853590	SDRT-1/4 with 9/64 hole	1/4"	9/64	1/8	1 ⁷ / ₈	1 ³ / ₈	1 ⁵ / ₁₆	3/4	5/8	250
853656	SDRT-3/8 with 1/8 hole	3/8"	1/8	3/32	2	1 ¹ / ₂	1 ¹ / ₄	1	9/16	1250
853246	SDRT-3/8 with 5/32 hole	3/8"	5/32	1/8	2	1 ¹ / ₂	1 ¹ / ₄	1	9/16	1250
853364	SDRT- 1/2 with 5/32	1/2"	5/32	1/8	2 ¹ / ₂	1 ³ / ₄	1 ¹ / ₄	1 ¹ / ₄	3/4	2500

RATCHET RENEWAL KITS

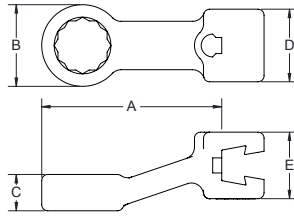
for all ratchet equipped torque wrenches and SDRT heads

Part No.	Description
816998	1/4" Ratchet Renewal Kit for ratchet 809504
816958	3/8" Ratchet Renewal Kit for ratchet 809505
816956	1/2" Ratchet Renewal Kit for ratchet 809506
816999	3/4" Ratchet Renewal Kit for ratchet 809507



BOX HEAD (BH)

1 5/16" Common Centerline / 36.5 mm Common Centerline



Part No.	Model	Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in. lbs.)
819060	BH - 1/4	1/4	1 ⁴⁵ / ₆₄	17/32	9/32	3/4	1 1/16	250
819061	BH - 5/16	5/16	1 ⁴⁵ / ₆₄	17/32	9/32	3/4	1 1/16	350
819062	BH - 3/8	3/8	1 3/4	5/8	9/32	3/4	1 1/16	450
819063	BH - 7/16	7/16	1 13/16	3/4	23/64	3/4	1 1/16	650
819064	BH - 1/2	1/2	1 ⁵⁵ / ₆₄	27/32	3/8	3/4	1 1/16	850
819065	BH - 9/16	9/16	2	1	13/32	7/8	1 1/16	1050
819066	BH - 5/8	5/8	2	1 1/16	35/64	15/16	1 3/16	1250
819067	BH - 11/16	1 1/16	2	1 1/8	1/2	15/16	1 3/16	1450
819068	BH - 3/4	3/4	2 1/16	1 1/4	35/64	1	1 3/16	1800
819070	BH - 7/8	7/8	2 1/4	1 5/16	5/8	1 1/4	1 3/16	2400
819071	BH - 15/16	15/16	2 1/4	1 1/2	21/32	1 1/4	1 3/16	2700
819072	BH - 1	1	2 1/4	1 9/16	23/32	1 1/4	1 3/16	3000
819073	BH - 1 1/16	1 1/16	2 1/4	2 1/16	7/8	1 1/4	1 3/16	3150
819074	BH - 1 1/8	1 1/8	2 1/2	2 1/16	7/8	1 1/4	1 3/16	3300
819075	BH - 1 1/4	1 1/4	2 1/2	2 1/16	7/8	1 1/4	1 3/16	3600

Part No.	Model	Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max. Torque (Nm)
809302	BH-8 mm	8	43.18	12.7	7.62	20.32	20.32	39
809303	BH-9 mm	9	45.72	15.24	7.62	20.32	20.32	50
809230	BH-10 mm	10	45.72	15.24	7.62	20.32	20.32	50
809231	BH-11 mm	11	45.72	20.32	10.16	20.32	20.32	73
809304	BH-12 mm	12	45.72	20.32	10.16	20.32	20.32	96
809232	BH-13 mm	13	45.72	20.32	10.16	20.32	20.32	96
809233	BH-14 mm	14	48.26	25.4	10.16	22.86	20.32	119
809234	BH-15 mm	15	50.8	27.94	12.7	25.4	22.86	141
809305	BH-16 mm	16	50.8	27.94	12.7	25.4	22.86	141
809235	BH-17 mm	17	50.8	27.94	12.7	25.4	22.86	163
809306	BH-18 mm	18	50.8	27.94	12.7	25.4	22.86	163
809236	BH-19 mm	19	53.34	33.02	15.24	25.4	22.86	203
809309	BH-20 mm	20	53.34	33.02	15.24	25.4	22.86	225
809307	BH-21 mm	21	53.34	33.02	15.24	25.4	22.86	237
809308	BH-22 mm	22	55.88	35.56	15.24	33.02	22.86	271
809237	BH-24 mm	24	55.88	35.56	17.78	33.02	22.86	305
809352	BH-27 mm	27	55.88	40.64	17.78	33.02	22.86	355

Dovetail vs. Quick Change Wrenches

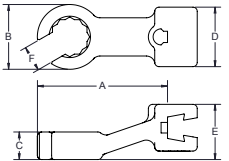
Dovetail wrenches use our CART tool to change heads. Quick Change versions require only your thumb.

These heads are available on the Exacta 2 1100, 1200, and 1250 Series digital torque wrenches.



FLARE NUT (FN)

1 5/16" Common Centerline / 36.5 mm Common Centerline



Part No.	Model	Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Max Torque (in. lbs.)
819025	FN-1/4	1/4	1 3/4	5/8	1 1/32	3/4	1 1/16	3/16	100
819026	FN-5/16	5/16	1 13/16	5/8	23/64	3/4	1 1/16	3/16	150
819027	FN-3/8	3/8	1 ⁵⁵ / ₆₄	27/32	3/8	3/4	1 1/16	9/32	200
819028	FN-7/16	7/16	1 ⁵⁵ / ₆₄	27/32	3/8	3/4	1 1/16	11/32	250
819029	FN-1/2	1/2	1 ³¹ / ₃₂	1 1/16	13/32	7/8	1 1/16	3/8	300
819030	FN-9/16	9/16	1 ³¹ / ₃₂	1 1/16	15/32	1	1 3/16	7/16	350
819031	FN-5/8	5/8	2	1 1/8	17/32	1	1 3/16	17/32	400
819032	FN-11/16	11/16	2 1/16	1 5/16	35/64	1	1 3/16	17/32	475
819033	FN-3/4	3/4	2 1/16	1 5/16	35/64	1	1 3/16	17/32	600
819034	FN-13/16	13/16	2 1/4	1	5/8	1 1/4	1 3/16	5/8	700
819035	FN-7/8	7/8	2 1/4	1 1/2	21/32	1 1/4	1 3/16	11/16	800
819036	FN-15/16	15/16	2 3/8	1 1/16	23/32	1 1/4	1 3/16	23/32	900
819037	FN-1	1	2 1/2	1 1/16	23/32	1 1/4	1 3/16	3/4	1000
819038	FN-1 1/16	1 1/16	2 1/2	1 1/16	7/8	1 1/4	1 3/16	3/4	1050

Part No.	Model	Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Max Torque (Nm)
809243	FN-8 mm	8	45.72	20.32	10.16	20.32	20.32	7.62	16
809217	FN-9 mm	9	45.72	20.32	10.16	20.32	20.32	7.62	19
809218	FN-10 mm	10	45.72	20.32	10.16	20.32	20.32	7.62	22
809221	FN-11 mm	11	45.72	20.32	10.16	20.32	20.32	7.62	28
809241*	FN-12 mm	12	48.26	25.40	10.16	22.86	20.32	10.16	30
809219	FN-13 mm	13	48.26	25.40	10.16	22.86	20.32	10.16	33
809220	FN-14 mm	14	50.80	27.94	12.70	25.40	20.32	10.16	40
809222	FN-15 mm	15	50.80	27.94	12.70	25.40	20.32	10.16	45
809238	FN-16 mm	16	50.80	27.94	12.70	25.40	20.32	12.70	50
809223	FN-17 mm	17	53.34	33.02	15.24	25.40	20.32	12.70	54
809239	FN-18 mm	18	53.34	33.02	15.24	25.40	20.32	15.24	61
809224	FN-19 mm	19	53.34	33.02	15.25	25.40	20.32	15.24	68
809240	FN-21 mm	21	53.34	38.10	17.78	33.02	20.32	17.78	80
809242	FN-22 mm	22	55.88	38.10	17.78	33.02	20.32	17.78	90
809225	FN-24 mm	24	55.88	40.64	17.78	33.02	20.32	17.78	105

*6 Pt Hex

What is the Common Centerline and why is it important?

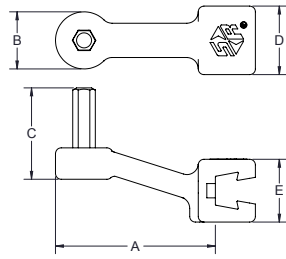
<http://www.srtorque.com/resources/understanding-the-common-centerline/>

Custom Solutions

In addition to our established line of interchangeable heads, SR offers custom solutions to meet your unique torque needs. For more information on custom heads and other solutions please contact SR customer service world wide at +1 847-455-867

HEX DRIVE (HD)

1/16" Common Centerline / 36.5 mm Common Centerline



Part No.	Model	Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max. Torque (in. lbs.)
819687	HD-3/32	3/32	1.7	0.5	0.8	0.8	0.8	30
819689	HD-1/8	1/8	1.7	0.5	0.8	0.8	0.8	70
853032	HD-9/64	9/64	1.7	0.5	0.8	0.8	0.8	70
819691	HD-5/32	5/32	1.7	0.5	1.0	0.8	0.8	135
819692	HD-3/16	3/16	1.7	0.5	1.0	0.8	0.8	235
819693	HD-7/32	7/32	1.8	0.6	1.0	0.8	0.8	340
819694	HD-1/4	1/4	1.8	0.6	1.0	0.8	0.8	450
819695	HD-5/16	5/16	1.8	0.8	1.0	0.8	0.8	850
819696	HD-3/8	3/8	1.8	0.8	1.0	0.8	0.8	850
819701	HD-3/4	3/4	2.2	1.4	2.0	1.3	0.9	2400
819702	HD-7/8	7/8	2.2	1.5	2.0	1.3	0.9	2700

Part No.	Model	Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max. Torque (Nm)
809315	HD-4 mm	4	43.18	12.70	25.40	20.32	2.32	14
809316	HD-5 mm	5	43.18	12.70	25.40	20.32	20.32	27
809317	HD-6 mm	6	45.72	15.24	25.40	20.32	20.32	37
809328	HD-8 mm	8	45.72	20.32	25.40	20.32	20.32	95
809330	HD-10 mm	10	48.26	25.40	25.40	22.86	20.32	141

CROWFOOT ADAPTER

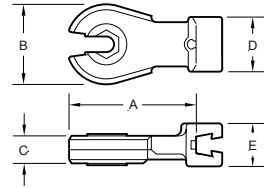
- Gain the significant advantage of our interchangeable head system by attaching the SRA to any fixed square drive wrench.
- Ideal for use when a direct reading torque wrench is required but space is limited.
- Use of an adapter requires calculation of torque output.
- When used with our 1 7/16" / 36.5mm Interchangeable Heads the adapter length will be 3" or 76.2mm.

Part No.	Model	Description
850653	SRA-3/8	3/8 Female-Male Dovetail
850655	SRA-1/2	1/2 Female-Male Dovetail



RATCHETING FLARE NUT (RFN)

1/16" Common Centerline / 36.5 mm Common Centerline
Single-direction ratchet for use with hydraulic or pneumatic fittings.



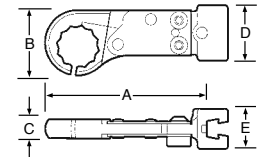
Part Number	Model	Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max. Torque (Nm)
819086	RFN-10 mm	10	50.8	7.62	15.24	22.86	17.78	45
819087	RFN-11 mm	11	50.8	7.62	15.24	22.86	17.78	45

RATCHETING TUBE WRENCH

Part No.	Model	Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max Torque (in lb)
853156	RTW-11/16	1 1/16	3 3/4	1 3/16	5/16	1 1/8	1 3/16	750

Part No.	Model	Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max Torque (Nm)
853166	RTW-17mm	17	94.74	33.53	9.65	28.58	20.64	84.74

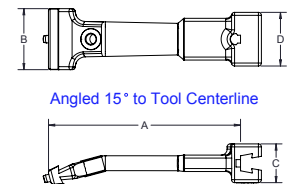
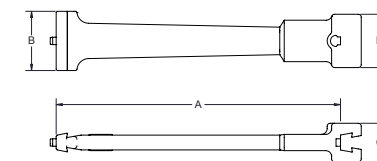
Caution: The configuration of the ratcheting tube wrench makes keeping our common centerline approach next to impossible to maintain. When setting torque value on an LTC wrench in conjunction with an RTW head, set the torque value using the model designation head that is to be used. When you change to a different RTW size, verify torque output.



LTCE-SERIES & LTCE-15 SERIES Straight & 15 Degree Angled Extension

Part No.	Model	Angle (degrees)	A (in.)	B (in.)	C (in.)	D (in.)	Max. Torque (in. lbs)
819424	LTCE - 4	0	4	1 1/8	3/8	1 1/8	300
819467	LTCE - 6	0	6	1 1/4	3/8	1 1/8	800
819487	LTCE - 4 - 15	15	4	1 1/8	3/8	1 1/8	300
819504	LTCE - 6 - 15	15	6	1 1/4	3/8	1 1/8	800

Do not use these with CCM-Series torque wrenches.
Preset the torque wrench after the extension and fastener engagement head have been attached to the tool.



Torque Application

When customers say that we build the world's best torque tools what do they really mean?

- Our tools are much easier to calibrate
- They stay in calibration much longer than other tools
- Tools provide highly repeatable results
- Last for many more cycles than other tools
- Have the lowest cost of ownership

Interchangeable heads

Mixed model manufacturing requires flexible tooling. Our interchangeable head system is the most flexible tooling system found anywhere in the world. Any dovetail head we make will fit on any dovetail wrench we make.

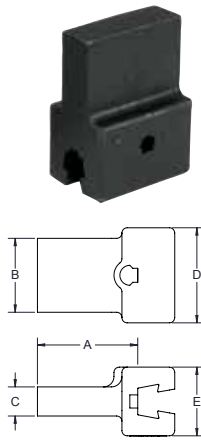
Accurate. Reliable. Durable.
Tools You Trust.



STANDARD TOOLING ADAPTERS

When fabricating special heads to be used with CCM torque handles other than Model CCM 300 and CCM 400, the 1 7/16" / 36.5mm dimension must be maintained between the inside of the attachment block and the centerline of the wrench head. Model CCM 300 and CCM 400 are calibrated to 3 7/8" / 98.4mm common centerline.

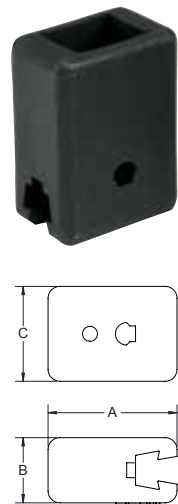
Part No.	Model	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max. Torque (Nm)
819901	STA - 1	1 5/8	9/16	1 1/32	3/4	1 1/16	1600
819902	STA - 2	1 5/8	7/8	1 1/32	1 1/8	1 3/16	2500
809917	STA - 3	2	1 1/2	1 1/32	1 1/2	1	4800



ADAPTERS FOR DIN STYLE HEADS

- Can be used to convert most DIN style heads to a female dovetail for use on all SR LTC series wrenches. Torque values should be set with the adapter and head attached to the wrench.
- Because of the variation in the length of the DIN plug type heads, it is not recommended that this adapter be used with CCM micrometer adjustable wrenches.

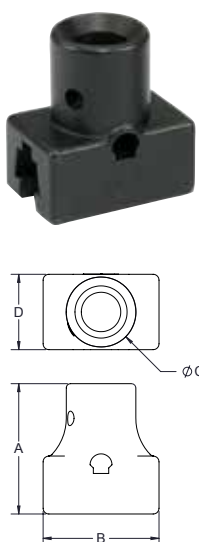
Part No.	Model	A (in.)	B (in.)	C (in.)
819136	Adapter, 9mm x 12mm	1 29/64	1 1/16	1
819137	Adapter, 14mm x 18mm	1 29/64	1 1/4	1 3/16



ADAPTERS FOR ROUND STYLE HEADS

- Can be used to convert most round style heads to a female dovetail for use on all SR LTC series wrenches. Torque values should be set with the adapter and head attached to the wrench.
- Because of the variation in the length of the round plug type heads, it is not recommended that this adapter be used with CCM micrometer adjustable wrenches.

Part No.	Model	Description	A (in.)	B (in.)	C (in.)	D (in.)	Max. Torque (in. lbs.)
853021	BAJ	"J" size female-female dovetail	1 13/32	1 1/4	3/4	1 3/16	2500
853022	BAY	"Y" size female-female dovetail	1 13/32	1 1/4	3/4	1 3/16	2500



Interchangeable Head Preset

LTC

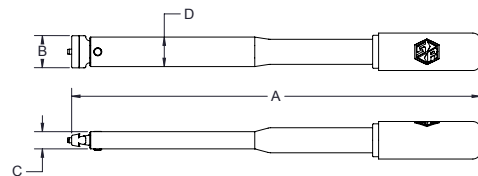
Series



- The LTC-Series is superb for use on the assembly line AND in field maintenance kits!
- The +/- 4% Accuracy meets or exceeds ASME B107.300 - 2010 and ISO 6789, and provides the quality your customers demand!
- Extremely versatile system permits use of fewer wrenches by connecting to well over 100 standard interchangeable heads, plus extensions, adapters, and your own custom heads!
- Excellent audible and tactile impulse when set torque achieved.
- Unique dovetail design transmits the load at right angle from the wrench to the head; exceptional strength and rigidity of connection.
- Light weight new comfort grip provides superior ergonomics, reducing operator fatigue.
- Extension Handle Part No. 853601 extends tool length for wrenches up to 3000 inch pounds. Handle Extension 853538 extends tool length for wrenches larger than 30001.



Over 100 interchangeable heads to choose from without changing torque values. Simply slide the heads on and "lock on quality".



Part No.	Model	Torque Capacity	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs.)
810100	LTC 50 I	10 in lb-50 in lb / 1.2 Nm-6 Nm	6 15/16	3/4	17/32	15/16	0.5
810011	LTC 150 I	30 in lb-150 in lb / 3.4 Nm-17 Nm	6 15/16	3/4	17/32	15/16	0.5
810574	LTC 300 I OHT	150 in lb -300 in lb / 17 Nm-34 Nm	6 15/16	3/4	17/32	15/16	0.5
810016	LTC 300 I	60 in lb-300 in lb / 6.8 Nm-34 Nm	8 59/64	3/4	17/32	15/16	0.8
810013	LTC 750 I	150 in lb-750 in lb / 17 Nm-85 Nm	12 47/64	1	17/32	15/16	1.0
810014	LTC 1800 I	360 in lb-1800 in lb / 40.8 Nm-204 Nm	16 11/64	1 1/4	17/32	15/16	1.3
810054	LTC ERGO 1800 I	360 in lb-1800 in lb / 40.8 Nm-204 Nm	20 9/16	1 1/4	17/32	15/16	1.5
810802	LTC 3000 I	600 in lb-3000 in lb / 67.79 Nm-338 Nm	20 51/64	1 1/2	5/8	1	4.9
810334	LTC 3600 I	720 in lb-3600 in lb / 81.4 Nm-407 Nm	24 21/64	1 3/4	49/64	2	5.5
810137	LTC 4800 I	960 in lb -4800 in lb / 108.4 Nm-542 Nm	34 11/32	1 3/4	49/64	2	8.3

Bidirectional Interchangeable Head Preset

BLT

Series

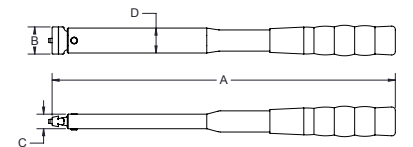


Bi-directional preset interchangeable head torque wrenches are ideal for applications where:

- The fastener or fitting to be tightened cannot readily be engaged with a socket.
- Very high durability is important.

These needs are common in assembly and standardized field maintenance operations, and the BLT-Series tools are superb for these types of applications.

- SR Dovetail Head connects to over 100 SR Interchangeable Heads. All of our interchangeable heads fit on all of our dovetail wrenches, meaning you don't have to buy multiple wrenches and heads in the same torque range to cover all fastener sizes.
- BLT-Series torque wrenches have CW +/- 4% Indicated Value Accuracy and CCW +/- 6% Indicated Value Accuracy from 20% to 100% of capacity, meeting or exceeding the requirements of ASME B107.300-2010 and ISO 6789.
- Error Proofing By Behavior Modification: excellent tactile and audible pulse when the preset torque is achieved.
- Error Proofing By Design: the flattened case prevents side-loading and ensures greater accuracy and durability.
- Comfortable cushion grip plus light-weight for excellent ergonomics.
- The torque is preset and locked in with a special CART tool.
- Torque can be set using any unit of measurement.
- Can be ordered preset from factory or you can set the torque with your own torque tester.
- All of our tools provide torque measurement in the clockwise direction. The BLT preset click wrench measures torque in both clockwise and counter clockwise directions.



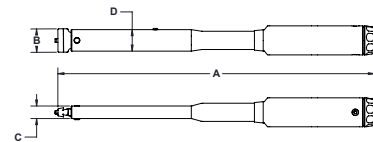
Part No.	Model	Torque Capacity	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs.)
874100	BLT 50 I	10 in lb-50 in lb / 1.2 Nm-6 Nm	8 27/32	3/4	17/32	15/16	0.8
874011	BLT 150 I	30 in lb-150 in lb / 3.4 Nm-17 Nm	8 27/32	3/4	17/32	15/16	0.8
874016	BLT 300 I	60 in lb-300 in lb / 6.8 Nm-34 Nm	8 27/32	3/4	17/32	15/16	0.8
874574	BLT 300 I OHT	60 in lb-300 in lb / 6.8 Nm-34 Nm	8 27/32	3/4	17/32	15/16	0.8
874013	BLT 750 I	150 in lb -750 in lb / 17 Nm-85 Nm	12 21/32	1	17/32	15/16	1.0
874014	BLT 1800 I	360 in lb-1800 in lb / 40.8 Nm-204 Nm	16 3/32	1 1/4	17/32	15/16	1.3
874054	BLT 1800 I ERGO	900 in lb-1800 in lb / 40.8 Nm-204 Nm	20 15/32	1 1/4	17/32	15/16	5.5
874334	BLT 3600 I	720 in lb-3600 in lb / 81.4 Nm-407 Nm	24 21/64	1 3/4	49/64	2	5.5
874137	BLT 4800 I	960 in lb-4800 in lb / 108.4 Nm-542 Nm	34 21/64	1 3/4	49/64	2	8.3

Interchangeable Head Micrometer Adjustable

CCM

Series

- Incredible Versatility! Accepts well over 100 interchangeable heads, as well as custom heads and extensions, and offers micrometer torque adjustment!
- The +/- 4% Indicated Value Accuracy meets or exceeds ASME B107.300 - 2010, AS 28431 and ISO 6789.
- Fast adjustment—takes the fewest rotations of any tool to reach full scale!
- Includes FREE calibration certificate from our ISO/IEC 17025 Accredited Laboratory.
- Excellent audible and tactile impulse when set torque achieved.
- Unique dovetail design transmits the load at right angle from the wrench to the head; exceptional strength and rigidity of connection.
- The pin lock assures positive head connection, yet permits head changeover in seconds!



Part No.	Model	Torque Capacity	Steps of Graduations	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs)
869769	CCM 50 I MG	10 in lb-50 in lb	1 in lb	10 1/8	3/4	17/32	15/16	0.5
869765	CCM 150 I MG	30 in lb-150 in lb	2 in lb	10 1/64	3/4	17/32	15/16	0.5
869773	CCM 200 I MG	40 in lb-200 in lb	2 in lb	10 1/64	3/4	17/32	15/16	0.5
869763	CCM 600 I MG	100 in lb-600 in lb	5 in lb	13 17/32	1	17/32	15/16	1
869766	CCM 750 I MG	150 in lb-750 in lb	5 in lb	13 17/32	1	17/32	15/16	1
869764	CCM 1200 I MG	200 in lb-1200 in lb	10 in lb	16 29/32	1 1/4	17/32	15/16	1.1
869762	CCM 1800 I MG	300 in lb-1800 in lb	10 in lb	16 9/16	1 1/4	17/32	15/16	1.3
869770	CCM 75 MG	15 ft lb-75 ft lb	1/2 ft lb	13 41/64	1	17/32	15/16	1
869771	CCM 150 MG	30 ft lb-150 ft lb	1 ft lb	17 7/64	1 1/4	17/32	15/16	1.3
810335*	CCM 300 MG	50 ft lb-300 ft lb	2 1/2 ft lb	25 29/32	1 3/4	43/64	2	6.5
810772*	CCM 400 MG	80 ft lb-400 ft lb	5 ft lb	35	1 3/4	43/64	2	8.3

Part No.	Model	Torque Capacity	Steps of Graduations	A (mm)	B (mm)	C (mm)	D (mm)	Weight (kg)
869784	CCM 6 Nm MG	1 Nm-6 Nm	.1 Nm	259.36	19.05	13.49	23.81	0.2
869785	CCM 20 Nm MG	4 Nm-20 Nm	.2 Nm	257.63	19.05	13.49	23.81	0.2
869786	CCM 100 Nm MG	20 Nm-100 Nm	0.5 Nm	347.39	19.05	13.49	23.81	0.5
869787	CCM 200 Nm MG	40 Nm-200 Nm	1 Nm	426.43	31.75	13.49	23.81	0.6
810788*	CCM 400 Nm	75 Nm-400 Nm	2.5 Nm	649.93	50.6	17.02	50.93	3
810794*	CCM 600 Nm	100 Nm-600 Nm	5 Nm	903.92	50.6	17.02	50.93	3.8

*Wrenches calibrated for use with heads having 3 7/8" (98.4mm) common centerline. On request wrenches can be calibrated for 1 7/16" (36.5mm) centerline.

Bidirectional Interchangeable Head Digital Torque Wrench

Exacta 2

Series



- Bi-directional accuracy of +/- 1% of Indicated Value from 20% to 100% of capacity in Track and Peak modes meets or exceeds requirements of ASME B107.300-2010 and ISO 6789.
- The residual mode makes this a great tool for auditing previously fastened joints.
- The display changes color with yellow/green/red sequence to inform operator status.
- Audible prompts from a beeper supplement visual information.
- Exacta® 2 comes with a serial cable for communication with a PC.
- Simple front panel programming. Four keyswitches on the front of the Exacta® 2 electronics module permit programming and operation of all key functions.
- 999 memory locations can be accessed, reviewed, uploaded and printed - all from the front keypad!
- Free Exawin software for programming Exacta® 2 from a PC.
- Four of six models have the SR dovetail and can be used with SR Interchangeable Heads.
- The Exacta® 2 uses four (4) AA NiMH batteries
- Includes FREE calibration certificate from our ISO/IEC 17025 Accredited Laboratory.



Part No.	Model	Torque Capacity	Lever Length	Overall Length	Weight	Head	
10530	Exacta 2 - 25	25 ft lb/33.8 Nm	12.5" / 317 mm	16.1" / 409 mm	2.8 lbs/ 1.27 kg	Dovetail	
10531	Exacta 2 - 75	75 ft lb/101.5 Nm	15.8" / 401mm	19.4" / 493 mm	3.0 lbs / 1.36 kg	Dovetail	
10532	Exacta 2 - 150	150 ft lb/203.3 Nm	17.8" / 452 mm	21.5" / 546 mm	3.1 lbs/ 1.40 kg	Dovetail	
10536	Exacta 2 - 250	250 ft lb/338.9 Nm	21.0" / 533 mm	21.2"/538mm	23.0"/584mm	Dovetail	
10533	Exacta 2 - 250 R	250 ft lb/338.9 Nm	21.0" / 533 mm	20.8"/527mm	25.0"/634mm	1/2" SD Ratchet	
10535*	Exacta 2 - 400	400 ft lb/543 Nm	36.5" / 927.1 mm	35.9"/912mm	35.2"/895mm	Dovetail	
10537	Exacta 2 - 400 R	400 ft lb/543 Nm	36.5" / 927.1 mm	33.7"/856mm	38.3"/973mm	3/4" SD Ratchet	
10534	Exacta 2 - 600 R	600 ft lb/813.5 Nm	55.1" / 1399 mm	59.7" / 1516 mm	13.0 lbs. / 5.90 kg	3/4" SD Ratchet	
10521	Exacta 2 - 25 QC	25 ft lb/33.8 Nm	12.5" / 317 mm	16.1" / 409 mm	2.8 lbs/ 1.27 kg	Quick Connect	
10522	Exacta 2 - 75 QC	75 ft lb/101.5 Nm	15.8" / 401mm	19.4" / 493 mm	3.0 lbs / 1.36 kg	Quick Connect	
10523	Exacta 2 - 150 QC	150 ft lb/203.3 Nm	17.8" / 452 mm	21.5" / 546 mm	3.1 lbs/ 1.40 kg	Quick Connect	
10518	Exacta 2 - 250 QC	250 ft lb/338.9 Nm	21.0" / 533 mm	25.2" / 640 mm	4.1 lbs/ 1.86 kg	Quick Connect	
21259	Charger & 4 AA NiMH	4 AA NiMH 1400 mAh batteries & charger, NAFTA only					
816261	AA NiMH Batteries	1400 mAh NiMH batteries, 4-pack					

*Wrenches calibrated for use with heads having 3 7/8" (98.4mm) common centerline. On request wrenches can be calibrated for 1 7/16" (36.5mm) centerline.

NiMH Batteries rated 1400 mAh to 2400 mAh are acceptable. Higher mAh ratings mean more cycles between recharge and longer recharge times. Use only NiMH AA rechargeable batteries in the 1200 Series Exacta 2 wrenches. Other batteries will damage the wrench and void the warranty.

We build highly durable tools with sophisticated electronics. We design circuits to be as energy efficient as possible. We are also concerned about the environment.

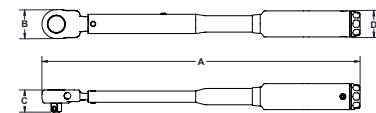
Our tool and tester circuit boards are designed on the highly consistent 1.2 volt power curve provided by rechargeable NiMH batteries. Other batteries like Alkaline or Lithium batteries provide 1.5 volts in the power curve. The additional voltage will damage the circuit board.

Square Drive Ratchet Micrometer Adjustable

SDR

Series

- Fastest torque adjustment across the scale via rotating grip.
- Locking tail piece prevents inadvertent target torque change.
- Ball bearing rockover assembly assures smooth operation, enhances repeatability and increases the cycle life of the wrench.
- At set torque value a strong audible and tactile impulse is emitted.
- Includes storage case.
- Ratchet design is very strong and durable.
- Accuracy of +/- 4% Indicated Value (from 20% to 100% of capacity) meets or exceeds ASME B107.300 - 2010, ISO 6789, and AS 28431.
- Includes FREE calibration certificate from our ISO/IEC 17025 Accredited Laboratory.



SDR Fixed Ratchet Head Series

Part No.	Model	Torque Capacity	Steps of Graduation	Square Drive (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs)
869749	2 SDR 50 I MG	10 in lb-50 in lb	1 in lb	1/4	11 15/64	31/32	51/64	15/16	1.0
869750	2 SDR 150 I MG	30 in lb-50 in lb	2 in lb	1/4	11 39/64	31/32	51/64	15/16	1.0
869781	2 SDR 200 I MG	40 in lb-200 in lb	2 in lb	1/4	10 23/32	31/32	51/64	15/16	1.0
869751	3 SDR 150 I MG	30 in lb-150 in lb	2 in lb	3/8	11 19/32	1 11/32	1 1/16	15/16	1.1
869761	3 SDR 200 I MG	40 in lb-200 in lb	2 in lb	3/8	11 23/32	1 11/32	1 1/16	15/16	1.1
869748	3 SDR 600 I MG	100 in lb-600 in lb	5 in lb	3/8	15 11/32	1 3/8	1 1/16	15/16	1.5
869752	3 SDR 750 I MG	150 in lb-750 in lb	5 in lb	3/8	15 5/32	1 3/8	1 1/16	15/16	1.5
869747	3 SDR 1200 I MG	200 in lb-1200 in lb	10 in lb	3/8	18 25/64	1 3/8	1 1/16	15/16	1.5
869755	4 SDR 1800 I MG	300 in lb-1800 in lb	10 in lb	1/2	18 45/64	1 5/8	1 27/64	15/16	2.0
869756	3 SDR 75 MG	15 ft lb-75 ft lb	.5 ft lb	3/8	14 31/32	1 3/8	1 1/16	15/16	1.5
869754	3 SDR 100 MG	20 ft lb-100 ft lb	1 ft lb	3/8	18 7/16	1 3/8	1 1/32	15/16	1.5
869757	4 SDR 150 MG	30 ft lb-150 ft lb	1 ft lb	1/2	19 3/16	1 5/8	1 27/64	15/16	2.0
869758	4 SDR 250 MG	50 ft lb-250 ft lb	2 ft lb	1/2	25 5/32	1 5/8	1 27/64	1	3.5
810760	6 SDR 300	50 ft lb-300 ft lb	2.5 ft lb	3/4	28 25/64	2 11/16	1 59/64	2	7.8
810597*	6 SDR 600	100 ft lbs-600 ft. lbs.	5 ft lb	3/4	38 3/4	2 11/16	1 59/64	2	10.5
810525**	6 SDR 700	100-700 ft. lbs.	5 ft lb	3/4	39 1/8	2 11/16	1 59/64	2	16.5

Part No.	Model	Torque Capacity	Steps of Graduation	Square Drive (in.)	A (cm)	B (cm)	C (cm)	D (cm)	Weight (kg)
869774	2 SDR 6 Nm MG	1 Nm-6 Nm	0.1 Nm	1/4	28.5	2.4	2.0	3.1	0.5
869775	2 SDR 20 Nm MG	4 Nm-20 Nm	0.2 Nm	1/4	28.5	2.4	2.0	3.1	0.5
869776	3 SDR 20 Nm MG	4 Nm-20 Nm	0.2 Nm	3/8	30.4	2.4	2.0	3.1	0.5
869782	3 SDR 50 Nm MG	10 Nm- 50 Nm	0.5 Nm	3/8	39.4	3.5	2.7	3.1	0.7
869777	3 SDR 100 Nm MG	20 Nm-100 Nm	0.5 Nm	3/8	39.1	3.5	2.7	3.1	0.7
869797	4 SDR 100 Nm MG	20 Nm-100 Nm	0.5 Nm	1/2	39.1	3.5	2.7	3.1	0.7
869783	3 SDR 140 Nm MG	30 Nm-140 Nm	1 Nm	3/8	47.0	3.5	2.7	3.1	0.7
869798	4 SDR 140 Nm MG	30 Nm-140 Nm	1 Nm	1/2 (3/8 body)	46.4	3.5	3.5	3.1	0.7
869778	4 SDR 200 Nm MG	40 Nm-200 Nm	1 Nm	1/2	49.5	5.0	3.6	3.1	0.9
869779	4 SDR 300 Nm MG	60 Nm-300 Nm	2 Nm	1/2	63.4	5.0	3.6	3.1	1.6
869789	6 SDR 300 Nm MG	60 Nm-300 Nm	2 Nm	3/4	63.4	5.0	3.6	3.1	1.6
810598*	6 SDR 800 Nm	150 Nm-800 Nm	5 Nm	3/4	97.5	6.8	5.0	3.8	4.8

** Optional extension tube, Part # 853363, can be ordered. Use of the extension requires wrench recalibration.
 ** The 6 SDR 700 comes from the factory with an extension tube and MUST be used with that tube attached.

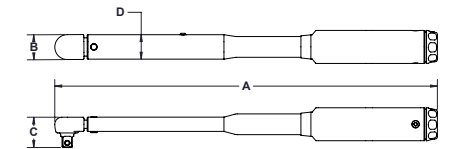
Square Drive Micrometer Adjustable

SD

Series

This is the SDR wrench with a fixed square drive rather than a ratchet.

- Accuracy of +/- 4% Indicated Value (from 20% to 100% of capacity) meets or exceeds ASME B107.300 - 2010, ISO 6789, and AS 28431.
- Includes FREE calibration certificate from our ISO/IEC 17025 Accredited Laboratory.



SD Fixed Male Square Drive Head Series - English

Part No.	Model	Torque Capacity	Steps of Graduation	Square Drive	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs.)
869160	2 SD 50 I MG	10 in lb-50 In lb	1 in lb	1/4"	10 11/16	59/64	55/64	15/16	1.0
869161	2 SD 150 I MG	30 in lb-150 in lb	2 in lb	1/4"	10 49/64	59/64	55/64	15/16	1.0
869159	3 SD 200 I MG	40 in lb-200 in lb	2 in lb	3/8"	10 37/64	59/64	1 1/32	15/16	1.0
869163	3 SD 750 I MG	150 in lb-750 In lb	5 in lb	3/8"	14 1/4	15/16	1 9/64	15/16	1.1
869167	4 SD 150 MG	30 ft lb-150 ft lb	1 ft lb	1/2"	17 23/32	15/16	1 15/64	15/16	2.0
810600*	6 SD 600	100 ft lb-600 ft lb	5 ft lb	3/4"	35 25/64	1 1/2	1 29/64	2	8.8

Part No.	Model	Torque Capacity	Steps of Graduation	Square Drive	A (cm)	B (cm)	C (cm)	D (cm)	Weight (kg)
810601*	6 SD 800 Nm	150 Nm-800Nm	5 Nm	3/4"	99.3	5.1	3.7	3.8	3.992

* Optional extension tube, Part # 853363, can be ordered. Use of the extension requires wrench recalibration.

Carry and Storage Cases

Strong, durable cases for carrying and storing your SR brand micrometer adjustable torque wrenches. Fits SDR, SD, and CCM series tools.

Part No.	Size	Type	Wrench Range
820122	Small	Molded Plastic	50I-200I, 6 Nm-20 Nm
820123	Medium	Molded Plastic	600I-150 ft. lbs., 50 Nm-200 Nm
820124	Large	Molded Plastic	250 ft. lbs., 300 Nm
820170	Extra Large	Molded Plastic	600-700 ft. lbs., 800 Nm



Each wrench includes molded plastic case.

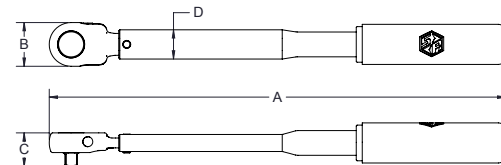
Square Drive Ratchet Preset LT^{CR}

Series

- Designed specifically for use on production lines where many fasteners are to be tightened to the same torque.
- For preset handle extension order PN 853601 for wrenches of 3000 in. lbs. or less.
- Light weight new comfort grip provides superior ergonomics, reducing operator fatigue.
- Accuracy of +/- 4% meets or exceeds ASME B107.300 - 2010 and ISO 6789, offering consistent assembly quality.
- Wrench can be calibrated using any unit of torque measure.
- Ball bearing rockover assembly assures smooth operation, enhances repeatability, increases cycle life of wrench, and helps control ownership costs.
- Excellent audible and tactile impulse when preset torque is achieved.
- Slide pin ratchet is extremely strong and durable.
- Torque tester must be used to set torque value.



Combination adjusting and release tool (CART 819117) allows operator to easily adjust the torque on all SR preset wrenches.



Part No.	Model	Torque Capacity	Square Drive	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs.)
810400	LT ^{CR} 50 I 1/4"	10 in lb-50 in lb / 1.2 Nm-6 Nm	1/4"	8	31/32	25/32	15/16	0.5
810401	LT ^{CR} 150 I 1/4"	30 in lb-150 in lb / 3.4 Nm-17 Nm	1/4"	8 1/16	31/32	51/64	15/16	0.5
810589	LT ^{CR} 150 I 3/8"	30 in lb-150 in lb / 3.4 Nm-17 Nm	3/8"	8 37/64	1 11/32	1 1/16	15/16	0.5
810058	LT ^{CR} 300 I 3/8"	60 in lb-300 in lb / 6.8 Nm-34 Nm	3/8"	10 17/32	1 11/32	1 1/16	15/16	1.0
810055	LT ^{CR} 750 I 3/8"	150 in lb-750 in lb / 17 Nm-85 Nm	3/8"	14 23/64	1 11/32	1 1/16	15/16	1.3
810060	LT ^{CR} 750 I 1/2"	150 in lb-750 in lb / 17 Nm-85 Nm	1/2"	14 23/64	1 11/32	1 15/64	15/16	1.3
810402	LT ^{CR} 1200 I 3/8"	240 in lb-1200 in lb / 27.2 Nm-136 Nm	3/8"	17 43/64	1 3/8	1 1/16	15/16	1.5
810056	LT ^{CR} 1800 I 1/2"	360 in lb-1800 in lb / 40.8 Nm-204 Nm	1/2"	18 11/32	1 5/16	1 27/64	15/16	1.8
810059	LT ^{CR} 3000 I 1/2"	600 in lb-3000 in lb / 67.8 Nm-339 Nm	1/2"	22 21/32	1 5/16	1 27/64	1	3.0
810430	LT ^{CR} 3000 I 3/4"	600 in lb-3000 in lb / 67.8 Nm-339 Nm	3/4"	22 21/32	1 5/16	1 19/32	1	3.0
810138*	LT ^{CR} 3600 I 3/4"	1200 in lb-3600 in lb / 81.4 Nm-407 Nm	3/4"	27 3/8	2 11/16	1 59/64	2	7.8
810151*	LT ^{CR} 7200 I 3/4"	1400 in lb-7200 in lb / 162.6 Nm-813 Nm	3/4"	37 3/8	2 11/16	1 59/64	2	10.0

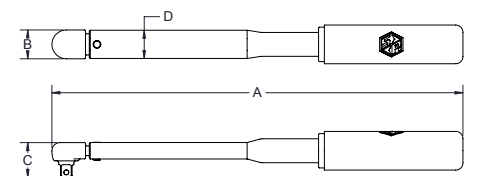
* Optional Extension Tube Part No. 853363 can be ordered. Use of the extension requires wrench recalibration.

Square Drive Preset LT^{CS}

Series

- This wrench is identical to the LT^{CR} wrench except it is built with a fixed square drive.
- Adjustments to torque settings can only be made with a Combination Adjusting and Release Tool (CART) to prevent tampering on the production line.

Preset Handle Extension (Part No. 853601) is available to increase reach for limited-access applications for wrenches of 3000 in.lb. capacity and below!



LT^{CS} Fixed Male Square Drive Head Series

Part No.	Model	Torque Capacity	Square Drive	A (in.)	B (in.)	C (in.)	D (in.)	Weight (lbs.)
810168	LT ^{CS} 50 I	10 in lb-50 in lb / 1.2 Nm-6 Nm	1/4"	7 1/2	31/32	55/64	15/16	0.5
810170	LT ^{CS} 150 I	30 in lb-150 in lb / 1.2 Nm-6 Nm	3/8"	7 1/2	31/32	1 1/32	15/16	0.5
810171	LT ^{CS} 300 I	60 in lb-300 in lb / 6.8 Nm-34 Nm	3/8"	9 29/64	31/32	1 1/32	15/16	1.0
810172	LT ^{CS} 750 I	150 in lb-750 in lb / 17 Nm-85 Nm	3/8"	13 23/64	31/32	1 9/64	15/16	1.25
810174	LT ^{CS} 1800 I	360 in lb-1800 in lb / 40.8 Nm-204 Nm	1/2"	16 51/64	31/32	1 15/64	15/16	1.5
810485*	LT ^{CS} 3600 I	720 in lb-3600 in lb / 80.14 Nm-407 Nm	3/4"	25 15/32	1 1/2	1 23/64	2	5.5
810153**	LT ^{CS} 7200 I	1400 in lb-7200 in lb / 162.6 Nm-813 Nm	3/4"	35 5/64	1 1/2	1 23/64	2	8.25

* Optional Extension Tube Part No. 853363 can be ordered. Use of the extension requires wrench recalibration.

** The LT^{CS} 7200 Part No. 810153 comes from the factory with an extension tube and MUST be used with that tube attached.

Flat Beams Are Superior

Flat Beam

M Series



The four most important requirements of a torque wrench, accuracy, reliability, durability, and low ownership cost, are combined into these exceptional tools. Accuracy is literally ground into the wrench. The special alloy steel beam is ground to a rate of deflection with the use of dead weights, rather than a dimensional tolerance. This process is time consuming and very labor intensive, but the result is a tool that remains accurate as long as the beam is intact and the pointer is on zero under no-load condition. The flat shape of the beam insures the wrench remains at a right angle to the fastener, reducing or eliminating side-loading error. This unique taper-grinding distributes stress evenly along the entire length of the beam, extending tool life indefinitely. With a minimum of moving parts, these tools are virtually repair and maintenance free.

Features

- Incredibly durable design - actual service life frequently measured in decades!
- Very low cost of ownership - exceptional accuracy retention permits extended calibration intervals, and they are virtually maintenance and repair free!
- Ideal for prevailing-torque and destructive testing applications.
- Low mass/low inertia design of pointers helps eliminate reading distortion.
- Memory feature consists of fingers which follow a track in the scale and remain in place to indicate maximum torque achieved.
- Peak torque indicated on scale is accurate, even on destructive testing applications.
- Pivoted handle concentrates load at precise point on lever to assure torque accuracy.
- Meets or exceeds ASME B107.300 - 2010 and ISO 6789.
- Accuracy of all flat beams is +/- 2% of indicated value from 20% to 100% of capacity, in both directions.
- Includes FREE calibration certificate from our ISO/IEC 17025 Accredited Laboratory.

Crowfoot Adapter

- Gain the significant advantage of our interchangeable head system by attaching the SRA to any fixed square drive wrench.
- Ideal for use when a direct reading torque wrench is required but space is limited.
- Use of an adapter requires calculation of torque output.
- When used with our 1 7/16" (36.5mm) Interchangeable Heads the adapter length will be 3" (76.3mm).

Crowfoot Adapter

Part Number	Model	Description
850653	SRA-3/8"	3/8" Female-Male Dovetail
850655	SRA-1/2"	1/2" Female-Male Dovetail



Flat Beam Memory Series - English

Part No.	Model	Torque Capacity	Steps of Graduations	Square Drive	Lever Arm Distance	Dimensions (in.)				Weight
						A	B	C	D	
• 850233	M 32 IO	0-32 in. ozs.	2 in. ozs.	1/4 in.	6.0 in.	6 7/8	1 3/64	1/4	2 1/4	0.2 lbs.
• 850254	M 80 IO	0-80 in. ozs.	5 in. ozs.	1/4 in.	6.2 in.	6 27/32	1 31/64	1/4	2 1/4	0.25 lbs.
• 850202	M 160 IO	0-160 in. ozs.	10 in. ozs.	1/4 in.	6.0 in.	6 27/32	1 31/64	1/4	2 1/4	0.25 lbs.
• 850188	M 10 I	0-10 in. lbs.	1/2 in. lb.	1/4 in.	6.0 in.	6 27/32	1 1/2	1/4	2 1/4	0.25 lbs.
• 850222	M 25 I	0-25 in. lbs.	1 in. lb.	3/8 in.	6.3 in.	6 27/32	1 25/32	3/8	2 1/4	0.4 lbs.
• 850242	M 50 I	0-50 in. lbs.	2 in. lbs.	3/8 in.	6.0 in.	6 7/8	1 45/64	3/8	2 1/4	0.4 lbs.
• 850191	M 100 I	0-100 in. lbs.	5 in. lbs.	3/8 in.	6.5 in.	7 7/16	1 45/64	3/8	2 1/4	0.4 lbs.
• 850211	M 200 I	0-200 in. lbs.	10 in. lbs.	3/8 in.	9.0 in.	7 7/16	1 45/64	3/8	2 3/4	0.5 lbs.
■ 850228	M 300 I	0-300 in. lbs.	10 in. lbs.	3/8 in.	13.5 in.	16	3 51/64	3/8	3 51/64	2.75 lbs.
■ 850246	M 600 I	0-600 in. lbs.	25 in. lbs.	3/8 in.	13.5 in.	16	3 51/64	3/8	3 51/64	2.75 lbs.
■ 850247	M 600 I	0-600 in. lbs.	25 in. lbs.	1/2 in.	13.5 in.	16	3 51/64	1/2	3 51/64	2.75 lbs.
■ 850195	M 1200 I	0-1200 in. lbs.	50 in. lbs.	1/2 in.	15.0 in.	17 1/2	3 51/64	1/2	3 51/64	2.75 lbs.
■ 850205	M 1800 I	0-1800 in. lbs.	50 in. lbs.	1/2 in.	18.0 in.	20 9/16	3 51/64	1/2	3 51/64	3.75 lbs.
■ 850220	M 25	0-25 ft. lbs.	1 ft. lb.	3/8 in.	13.5 in.	16	3 51/64	3/8	3 51/64	2.75 lbs.
■ 850240	M 50	0-50 ft. lbs.	2 ft. lbs.	3/8 in.	13.5 in.	16	3 51/64	3/8	3 51/64	2.75 lbs.
■ 850241	M 50	0-50 ft. lbs.	2 ft. lbs.	1/2 in.	13.5 in.	16	3 51/64	1/2	3 51/64	2.75 lbs.
■ 850190	M 100	0-100 ft. lbs.	5 ft. lbs.	1/2 in.	15.0 in.	17 1/2	3 51/64	1/2	3 51/64	2.75 lbs.
■ 850198	M 150	0-150 ft. lbs.	5 ft. lbs.	1/2 in.	18.0 in.	20 9/16	3 51/64	1/2	3 51/64	3.75 lbs.
■ 850227	M 300	0-300 ft. lbs.	10 ft. lbs.	3/4 in.	30.0 in.	34 1/4	5 5/32	3/4	3 51/64	10.75 lbs.

Flat Beam Memory Series - Newton Metre

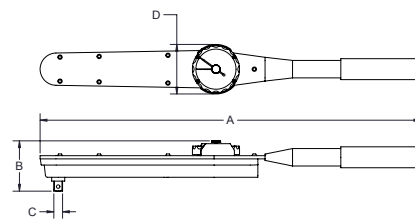
Part No.	Model	Torque Capacity	Steps of Graduations	Square Drive	Lever Arm Distance	Dimensions (cm)				Weight
						A	B	C	D	
• 855276	M 110 cNm	0-110 cNm	5 cNm	1/4 in.	152.4 mm	17.37	1.59	0.64	5.72	0.5625 kg
• 855281	M 2.5 Nm	0-2.5 Nm	.1 Nm	3/8 in.	158.8 mm	17.37	3.12	0.95	5.72	0.765 kg
• 855282	M 5 Nm	0-5 Nm	.2 Nm	3/8 in.	152.4 mm	17.37	3.12	0.95	5.72	0.765 kg
• 855283	M 12 Nm	0-12 Nm	.5 Nm	3/8 in.	165.1 mm	18.87	3.12	0.95	5.72	0.855 kg
• 855284	M 22 Nm	0-22 Nm	1 Nm	3/8 in.	228.6 mm	25.15	3.12	0.95	6.99	1.125 kg
• 855285	M 34 Nm	0-34 Nm	1 Nm	3/8 in.	340.4 mm	40.64	6.17	0.95	9.63	6.1875 kg
■ 855287	M 70 Nm	0-70 Nm	2 Nm	3/8 in.	342.9 mm	40.64	6.17	0.95	9.63	6.1875 kg
■ 855288	M 70 Nm	0-70 Nm	2 Nm	1/2 in.	342.9 mm	40.64	6.50	1.27	9.63	6.1875 kg
■ 855289	M 140 Nm	0-140 Nm	5 Nm	1/2 in.	381.0 mm	40.64	6.50	1.27	9.63	6.1875 kg
■ 855290	M 210 Nm	0-210 Nm	10 Nm	1/2 in.	457.2 mm	52.22	6.50	1.27	9.63	8.4375 kg
■ 855292	M 410 Nm	0-410 Nm	10 Nm	3/4 in.	762.0 mm	87.00	10.59	1.91	20.32	24.1875 kg



Industrial Dial IDW

Series

- Oversized single scale dial face is extremely easy to read and helps to eliminate parallax error.
- Heavy duty dial guard protects against breakage.
- Memory indicator is provided on each wrench and remains at the maximum torque achieved for positive verification.
- Each wrench comes in its own custom storage box.
- Wrench can be used in both the left and right hand direction.
- Accuracy of +/- 3% Indicated Value (from 20% to 100% of capacity) meets or exceeds ASME B107.300 - 2010, and ISO 6789.
- A neoprene rubber grip is provided for comfort and to insure proper hand placement for maximum accuracy; not available on 3/4" and 1" sq. dr. models.
- Extension handle included on 600 ft.-lb/800Nm and greater capacity models for ergonomic advantage.
- Includes FREE NIST-traceable tabulated certification!



Industrial Dial Wrench Series — English

Part No.	Model	Torque Capacity	Steps of Graduation	Square Drive	Weight:	Length (in.):	Dial Diameter (in.)
815700	IDW 30 I	6-30 in. lbs.	1 in. lb.	¼ in.	1.2 lbs.	10¼	2½
815719	IDW 50 I	10-50 in. lbs.	2 in. lbs.	¼ in.	1.2 lbs.	10¼	2½
815701	IDW 150 I	30-150 in. lbs.	5 in. lbs.	½ in.	1.2 lbs.	10¼	2½
815702	IDW 300 I	60-300 in. lbs.	5 in. lbs.	¾ in.	1.2 lbs.	10¼	2½
815703	IDW 600 I	120-600 in. lbs.	10 in. lbs.	¾ in.	1.4 lbs.	12¼	2½
815704	IDW 150	30-150 ft. lbs.	2 ft. lb.	½ in.	2.8 lbs.	20¾	2½
815705	IDW 250	50-250 ft. lbs.	5 ft. lb.	½ in.	2.8 lbs.	20¾	2½
815706*	IDW 600	120-600 ft. lbs.	10 ft. lbs.	¾ in.	7.5 lbs.	46¾	2½
815722*	IDW 1000	200-1000 ft. lbs.	10 ft. lbs.	1 in.	7.5 lbs.	46¾	2½

Industrial Dial Wrench — Newton Metre

815720	IDW 6 Nm	1.2-6 Nm	.25 Nm	¼ in.	0.5443 Kg	26.162 Cm	7.30 cm
815707	IDW 15 Nm	3-15 Nm	.25 Nm	¼ in.	0.5443 Kg	26.162 Cm	7.30 cm
815708	IDW 35 Nm	7-35 Nm	.5 Nm	¼ in.	0.5443 Kg	26.162 Cm	7.30 cm
815709	IDW 70 Nm	14-70 Nm	1 Nm	¼ in.	0.6350 Kg	31.242 Cm	7.30 cm
815710	IDW 200 Nm	40-200 Nm	2.5 Nm	½ in.	1.27 Kg	52.837 Cm	7.30 cm
815711	IDW 350 Nm	70-350 Nm	5 Nm	½ in.	1.27 Kg	52.837 Cm	7.30 cm
815712*	IDW 800 Nm	160-800 Nm	10 Nm	¾ in.	3.40 Kg	118.11 Cm	7.30 cm
815713*	IDW 1300 Nm	260-1300 Nm	25 Nm	1 in.	7.71 Kg	181.61 Cm	7.30 cm

* Includes Extension Handle

NOTE: Torque output on a dial wrench is NOT impacted by use of the handle. However, the addition of a crowfoot adapter does change the tool output and must be considered in the torque equation to ensure accuracy.

Torque Multipliers

Series

Features

- Capacities to 4000 ft.-lbs. or metric equivalent.
- Multipliers can be used in any unit of measure, depending on the wrench.
- Reaction bar keeps gear box from turning.
- Gear train within multiplier has natural frictional loss. For normal requirements, a loss factor of 10% to 20% may be used.

As noted above, there is frictional loss in output torque due to the gears. As a result of the frictional loss, we recommend our Exacta 2, (1% Indicated Value) or our M-Series Flat Beam wrenches (2% Indicated Value).

The frictional loss has a significant impact on torque accuracy when compared with using only a torque wrench. Using a more accurate torque wrench reduces the torque output variable.



Part No.	Model	Style	Max Torque	Input Drive Size	Output Drive Size	Gear Ratio	Overall Length:	Weight
850369	TM 1000	Low-ratio	1000 ft. lbs.	½"	¾"	4-1	26 in.	12 lbs.
850367	TM 2000	Low-ratio	2000 ft. lbs.	¾"	1"	4-1	26 in.	14 lbs.
850368	TM 4000	Low-ratio	4000 ft. lbs.	1"	1½"	4.33:1	30½ in.	35 lbs.

Thrust Load Testing PM Series Screwdrivers

Torque tools are used to remove variables in the measuring and tightening process.

A poorly designed tool does not eliminate variables introduced by the operator. It does not achieve the intended goal and becomes a variable in and of itself.

When it comes to screwdrivers, an operator naturally applies thrust force to prevent slipping off, or out of the screw. A properly designed screwdriver eliminates the variable of thrust force.

If the design allows the measuring element to be affected by thrust force, the results in the test lab will be quite different from the actual results on the shop floor.

In our test methodology our results had to be reproducible and quantifiable. First we tested the transducer used in the test to ensure that it was unaffected by thrust loads.

Then we tested our screwdrivers with no thrust force, followed by testing with measurable thrust force through the use of certified weights.

When you find a torque screwdriver with results like this, buy it.

PM-5 set @ 20 in.oz.

Test #	w/o Thrust Load		w/10 lb Thrust Load		w/30 lb Thrust Load	
	Actual	+/- Accuracy	Actual	+/- Accuracy	Actual	+/- Accuracy
1	19.6	-2.000%	19.8	-1.000%	19.4	-3.000%
2	19.3	-3.500%	20.4	2.000%	19.4	-3.000%
3	19.7	-1.500%	20.6	3.000%	19.4	-3.000%
4	19.4	-3.000%	19.8	-1.000%	19.7	-1.500%
5	20.7	3.500%	20	0.000%	20	0.000%
6	20.5	2.500%	19.7	-1.500%	20.2	1.000%
7	20.6	3.000%	20.3	1.500%	20	0.000%
8	20	0.000%	20	0.000%	19.6	-2.000%
9	19.8	-1.000%	19.9	-0.500%	19.8	-1.000%
10	19.3	-3.500%	19.6	2.000%	19.9	-0.500%
11	19.7	-1.500%	19.9	-0.500%	20.6	3.000%
12	19.7	-1.500%	19.8	-1.000%	20.4	2.000%
13	19.7	-1.500%	20.01	0.050%	20.3	1.500%
14	19.5	-2.500%	19.9	-0.500%	19.6	-2.000%
Average	19.821	-0.893%	19.979	-0.104%	19.879	-0.607%
Range	1.4		1		1.2	

PM-15 set @ 3 in.lb.

Test #	w/o Thrust Load		w/10 lb Thrust Load		w/30 lb Thrust Load	
	Actual	+/- Accuracy	Actual	+/- Accuracy	Actual	+/- Accuracy
1	3.08	2.667%	2.96	1.333%	3.02	0.667%
2	2.99	-0.333%	2.99	-0.333%	3.03	1.000%
3	2.93	-2.333%	3.08	2.667%	3.01	0.333%
4	2.9	-3.333%	3.08	2.667%	3.01	0.333%
5	2.92	-2.667%	3.1	3.333%	2.97	-1.000%
6	2.93	-2.333%	3.13	4.333%	3.01	0.333%
7	2.92	-2.667%	3.02	0.667%	3.08	2.667%
8	2.98	-0.667%	2.99	-0.333%	3.08	2.667%
9	2.95	-1.667%	2.98	-0.667%	3.08	2.667%
10	2.99	-0.333%	2.98	-0.667%	3.12	4.000%
11	2.93	-2.333%	2.97	-1.000%	3.03	1.000%
12	2.95	-1.667%	2.99	-0.333%	2.99	-0.333%
13	2.9	-3.333%	3.01	0.333%	2.96	-1.333%
14	2.96	-1.333%	3.09	3.000%	2.96	-1.333%
Average	2.952	-1.595%	3.026	0.881%	3.025	0.833%
Range	0.18		0.17		.16	

Micrometer Adjustable Torque Screwdriver

CAL 36/4

Series

- Accuracy of +/- 6% Indicated Value (from 20% to 100% of capacity) meets or exceeds ASME B107.300 - 2010 and ISO 6789.
- Incredibly durable! Many users have experienced a service life of 10+ years!
- Operators cannot overtorque - clutch releases at set torque.
- Anti-backlash design for repeatability.
- To operate, simply dial in torque and insert bit.
- Bi-directional CW/CCW versatility.
- Polished aluminum exterior.
- Scales clearly engraved on shaft and magnified for ease of reading.
- Includes FREE calibration certificate from our ISO/IEC 17025 Accredited laboratory! Can be ordered with certification for English or Metric units of measure. (Use Part No. 810017 for Nm certification on Cal 36/4.)
- Uses standard bits, adapters, and sockets.



Specifications

Capacity 2-36 in. lbs./2-4 Nm
 Graduation 2 in. lbs./2 Nm
 Length (less bit) 7⁹/₆₄"
 Grip Diameter 1³/₆₄"
 Weight 0.5 lbs.
 Drive Size 1/4" Female Hex

CAL 36/4 Part No. 810587

CAL 40 Part No. 810477

Capacity 3-40 kgf·cm.
 Graduation 2 kgf·cm
 Length (less bit) 7³⁹/₆₄"
 Grip Diameter 1¹/₆₄"
 Weight 0.5 lbs.
 Drive Size 1/4" Female Hex



**CAL 36/4K
Screwdriver Kit**
29 Piece Kit

Part No. 810568

Contains 1 each of the listed bits and a CAL 36/4 screwdriver

- | | | |
|-------------|--------------------|--------------|
| Hex 5/64 | Slotted 8-10 | Torx T20 |
| Hex 3/32 | Slotted 12-14 | Torx T25 |
| Hex 1/8 | Socket Adapter 1/4 | Torx T30 |
| Hex 1/4 | Bit Holder 1/4 | Torx T40 |
| Hex 3/8 | Phillips #0 | Sq. Recess 0 |
| Posidriv #1 | Phillips #1 | Sq. Recess 1 |
| Posidriv #2 | Phillips #2 | Sq. Recess 2 |
| Slotted 0-1 | Phillips #3 | Sq. Recess 3 |
| Slotted 3-4 | Torx T10 | |
| Slotted 5-6 | Torx T15 | |

Includes Custom Case

Part No. 810588

- | Part No. | Description |
|----------|----------------------------|
| 810587 | CAL 36/4 Screwdriver |
| 819953 | 1/4" Hex to 1/4" Sq. Drive |
| 809449 | No. 1 Phillips Power Bit |
| 809467 | No. 2 Phillips Power Bit |
| 809434 | No. 2 Slotted Power Bit |
| 809448 | No. 4 Slotted Power Bit |

Includes Custom Case

EMTSK 36/4 Screwdriver Kit

6 Piece Kit



Square Drive Micrometer Adjustable ExacTorq® Series 1



Exact Torque Adjustment Using Digilock Control Mechanism

Gone are the days of estimating torque. A simple twist of ExacTorq's end-mounted Digilock mechanism sets your torque levels in exact, single digit increments. The positive locking detent secures your selection.

Enhance Comfort and Accuracy with Advanced Ergonomics

Enhanced comfort translates into enhanced accuracy. The ExacTorq® features a tri-lobular handle design. This gives users enhanced leverage, plus rounded surfaces for comfort and superior grip control. With each turn, this unique design involves only major muscle groups to reduce strain and potential repetitive-motion injury. Additionally, the ExacTorq® is comfortable in even the smallest of hands, performing flawlessly when used by women and men on the assembly line.

Features

- Digilock Control Mechanism revolutionizes manual torque adjustment.
- Positive locking detent secures selected torque value.
- Can be used in both right and left hand directions.
- Designed to meet or exceed ASME B107.300 - 2010 and ISO 6789 specifications, each ExacTorq ships with a calibration certificate from our ISO/IEC 17025 Accredited Laboratory.
- Operator cannot over torque. Clutch releases automatically when desired torque has been achieved.
- Uses standard bits, sockets and adapters.
- Anti-backlash design enhances repeatability.
- Accuracy of +/- 6% Indicated Value.

Includes FREE certification from our ISO /IEC 17025 Accredited calibration laboratory.

Specifications

Part Number
Capacity
Graduation
Length (less bit)
Weight
Drive Size

ExacTorq 100

810045
20-100 in. oz.
1 in. oz.
6 ²⁷/₆₄"
0.4 lbs
¼ in. Female Hex

ExacTorq 74

810046
15-74 cNm
1cNm
6 ³⁵/₆₄"
0.4 lbs
¼ in. Female Hex

Preset Screwdriver PM Series

- Perfect for assembly of electronic components and precision mechanical products!
- Ideal for use in field maintenance kits - electro-static discharge compliant when ESD practices are used.
- Clutch releases automatically when preset torque attained - no overtorquing.
- Anti-backlash design for repeatability.
- Long shaft allows operator to reach limited-access applications.
- Accuracy of +/- 6% (from 20% to 100% of capacity) meets or exceeds ASME B107.300 - 2010 and ISO 6789 requirements.
- Bi-directional versatility - CW and CCW operation.
- Uses standard bits, adapters, and sockets.
- Torque value can be set using any unit of torque measure.



PM-15



PM-36

Specifications

Capacity

Length (less bit)

Grip Diameter

Weight

Drive Size

PM-5

Part No. 810007

100 in. ozs.
70 cNm
7.2 kgf·cm

5 ¹⁷/₆₄"

6 ⁴⁹/₆₄"

0.25 lbs.

1/4" Female Hex

PM-15

Part No. 810064

15 in. lbs.
1.65 Nm
17.2 kgf·cm

6 ²¹/₆₄"

1 ¹/₃₂"

0.3 lbs.

1/4" Female Hex

PM-36

Part No. 810563

36 in. lbs.
4 Nm
40 kgf·cm

7 ⁵/₃₂"

1 ¹⁵/₆₄"

0.5 lbs.

1/4" Female Hex

Color code all your screwdrivers

When you place your order, just mention you want colors and we will send a package of five easy-to-apply heat shrink sleeves.

Part No.

816734
816735
816736
816737
816738
816739

Package Contents

Multi-color (1 each)
Blue (5)
Yellow (5)
Red (5)
White (5)
Green (5)





TORQUE TOOL CALIBRATION

Tips & Techniques

Annual tool certification with “As Found” and “As Left” results is a bare minimum for quality control. Assembly operations should consider a verification program in addition to annual certification. The verification program should take into consideration the number of cycles the tools perform on a monthly, weekly, or daily basis.

Seven things to remember about torque tool calibration:

1. Remember the difference between Indicated Value (I.V.) and Full Scale Value (FSV) for testing and tool use. Indicated Value readings maintain the same level of accuracy up and down the tool capacity. Full Scale Value maintains that level of accuracy only at tool full capacity. Moving down the tool capacity scale accuracy decreases. A tool with +/- 4% FSV at capacity has a +/- 8% accuracy at 50% of tool capacity. That accuracy continues to decrease as the tool is used at lower capacity levels.
2. Use a torque tester that has a minimum tester to tool ratio of 4:1 accuracy. If your tool is +/- 1% I.V. the tester used to calibrate that tool must be at least +/- .25% I.V.
3. Use a mechanical loader to calibrate the tool and then use hand testing to verify calibration.
4. When starting the day be sure to warm up the tester by testing a wrench five times before beginning to take readings.
5. If a tool has been unused for a day or more, be sure to exercise the tool at least three times prior to testing. The spring and lubricants can “settle.” When this happens the first few readings may not accurately represent tool condition.
6. Testing cycles should be based on activity, not time frames. If you can’t track activity, then use time frames as a method of tracking calibration.
7. Tools should be labeled with tool capacity, work station, date of last calibration, next calibration date, and the person responsible for calibration.



Calibration

Becoming ISO/IEC 17025 accredited with one calibration station is one thing. Consistently repeating results at twelve stations and remaining within your uncertainty budget is another. No small detail can be over looked. To eliminate the effect of side-loads, we designed our transducers to have bearings to support the working end. From 1 inch pound to 600 foot pounds we designed our transducers to have a common mounting footprint. To ensure +/- .25% indicated value accuracy, our System 8 instrument stores a 20-point calibration table for each transducer.

Whether you are testing tools in the lab or on the plant floor, our System 8 and TorqTronics 2 are designed to test most, if not all common, assembly tools. This includes torque controlled power tools. Both of these testers come with our “Fail Safe Engineering” protocol that notifies the operator when the transducer has been stretched beyond 120% of its rated capacity.

We use our test equipment every day and invite you to do the same.



System 8[®]

Digital Torque Tester

Our most accurate digital torque tester with Fail Safe Engineering!



The ultimate in torque tool calibration.

The SYSTEM 8 Digital Torque Tester is much more than a torque calibration unit that is accurate to +/- .25% of Indicated Value from 10% to 100% of capacity. It is a well-designed system engineered to turn uncertainties into certainties with:

- A wide working range from 2.5 inch oz to 2000 ft. lbs.
- Floating decimal point, 6 digit display is easy to read
- Highly visible display with 6 digit floating decimal point provides superior resolution.
- Fail Safe Engineering over capacity and alert tracking.
- Greater accuracy and durability with simplicity and ease of operation
- Selectable operation modes for testing all but impact tools.

Like all Sturtevant Richmond products, the System 8 meets or exceeds the following standards:

- ASME B107.300 - 2010 Electronic Tester, Hand Torque Tools
- ISO 5393 Rotary tools for threaded fasteners- products test methods.
- ASME B107.4M Driving and Spindle Ends for Portable Hand, Impact, Air, and Electric Tools (Percussion Tools Excluded).
- ISO 1773 Assembly Tools for Bolts and Screws – Driving Squares for Power Socket Wrenches and Hand Socket Wrenches.
- ISO 1774-2 Assembly Tools for Bolts and Screws – Driving Squares for power socket tools

System 8 display has a floating point decimal resolution showing six digits throughout. Combine that with an accuracy of 0.25% (indicated value) from 10% to 100% and System 8 capabilities give you control of your torque testing program.

The new System 8[®] line of Digital Torque Testers is ideal for interim or daily torque testing programs for clicker torque wrenches, camover torque tools, torque screwdrivers, and non-impact power tools.

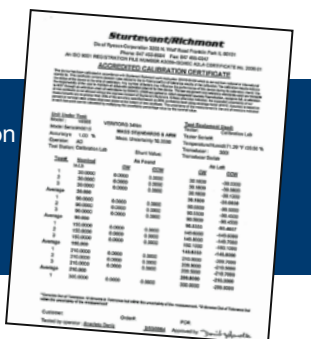
Features and Characteristics

- Tests in both clockwise and counterclockwise directions.
- Four modes of operation - Track, Peak, Initial Peak and Power Tool - provide excellent versatility.
- Units of measure include English, Standard International and Metric.
- 999 records that can be downloaded
- Works with Torque Tool Manager 4 for calibration/documentation.
- Red/Green LED indicates whether a measurement is within the target torque value.
- Includes FREE certificate of calibration from our ISO/IEC 17025 Accredited Laboratory!
- Includes 120-240 VAC to 6 VDC screw on power supply for security during power tool testing.
- Runs on four AA NiMH rechargeable batteries. Batteries sold separately. Quick charge unit is available.
- Includes a rugged protective case for storage and transit.
- Power Tool mode has ten filters and will accurately test all clutch type and pulse tools.

Ordering Information

Part No.	Model	Description
10600	System 8	System 8 Digital Torque Tester
10601	Transducer Switch Module	Transducer Switch Module

Includes FREE certification from our ISO/IEC 17025 Accredited calibration laboratory.



Static Transducers

TT, TT-QC, TT-L Series

Sturtevant Richmond is proud of our flexible transducers for the System 8 and our legacy System 4/5/6—with the legendary Sturtevant Richmond quality built in!

Sturtevant Richmond transducers now come in four designs; two flanged designs for those with existing systems that are expanding their line or using an SR Mechanical Loader, a Quick Connect design for use with our 1000 and 2000 pound capacity Mechanical Loaders, and a new “L” design that incorporates its’ own mounting bracket for rapid horizontal or vertical mounting.

To obtain additional information on these transducers and their use with current and legacy systems, visit. www.srtorque.com



TT-Series Transducers

- Traditional SR hex flange style
- Can be mounted to ML 250 and ML 600 Mechanical Loaders.
- Can be Mounted to Quad Plate for multiple mounting on ML 250.
- Requires detachable cable Part No. 10293. (Except TT 25IO, 1000 and 2000 Series)
- Smaller sizes (up to 400 in. oz. capacity) can be mounted to SSMB, STMB, or UMB brackets.
- Larger sizes (500 ft. lbs. and above) can be mounted on UMB L-bracket.



TT Series			Torque Range			
Part No.	Model	Drive	in.ozs.	in.lbs.	cNm	kgf•Cm
10009*	TT 25IO	.25" Hex Male	2.5–25	0.16–1.6	1.77–17.7	0.18–1.8
10285	TT 10I	.25" Hex Male	16–160	1–10	11.3–113	1.15–11.5
Part No.	Model	Drive	in.lbs.	ft. lbs	Nm	kgf. Cm
10286	TT 50I	.25" Hex Male	5–50	.4–4	.56–5.6	5.6–57
10287	TT 100I	.375" Hex Male	10–100	.83–8.3	1.13–11.3	11.5–115
10288	TT 300I	.375" Hex Male	30–300	2.5–25	3.4–34	34.5–345
10289	TT80	.5" Square Female	96–960	8–80	10.8–108.5	110.6–1106
10290	TT150	.5" Square Female	180–1800	15–150	20.3–203.4	207.4– 2073.8
10291	TT250	.75" Square Female	300–3000	25–250	34–340	345.6–3456.4
Part No.	Model	Drive	ft. lbs.	Nm	Kgf. M	
10292	TT 600	.75" Square Female	60–600	81.3–813.5	8.3–83	
10026*	TT 1000	1" Square Female	100–1000	135.6–1355.8	14–138.2	
10027*	TT 2000	1" Square Female	200–2000	271.2–2712	28–276.5	

*Cable included. All other transducers require additional cable (P/N 10293).

TT-QC Series Transducers

- Quick Connect System
- Can be mounted to ML 1000 and ML 2000 Mechanical Loaders.
- Removal of adapter plate permits use with ML 250 (250 ft. lbs. capacity and below).
- Requires detachable cable Part No. 10293. (Except TT-QC 25IO, 1000 and 2000 Series)
- TT-QC 1000 and 2000 Series can also be used with ML 1000 and ML 2000 and feature permanently attached cables



TT-QC Series			Torque Range			
Part No.	Model	Drive	in.ozs.	in.lbs.	cNm	kgf•Cm
10211*	TT-QC 25IO	.25" Hex Male	2.5–25	0.16–1.6	1.77–17.7	0.18–1.8
10300	TT-QC 10I	.25" Hex Male	16–160	1–10	11.3–113	1.15–11.5
Part No.	Model	Drive	in.lbs.	ft. lbs	Nm	kgf. Cm
10301	TT-QC 50I	.25" Hex Male	5–50	.4–4	.56–5.6	5.6–57
10302	TT-QC 100I	.375" Hex Male	10–100	.83–8.3	1.13–11.3	11.5–115
10303	TT-QC 300I	.375" Hex Male	30–300	2.5–25	3.4–34	34.5–345
10304	TT-QC 80	.5" Square Female	96–960	8–80	10.8–108.5	110.6–1106
10305	TT-QC 150	.5" Square Female	180–1800	15–150	20.3–203.4	207.4– 2073.8
10306	TT-QC 250	.75" Square Female	300–3000	25–250	34–340	345.6–3456.4
Part No.	Model	Drive	ft. lbs.	Nm	Kgf. M	
10307	TT-QC 600	.75" Square Female	60–600	81.3–813.5	8.3–83	
10209*	TT-QC 1000	1" Square Female	100–1000	135.6–1355.8	14–138.2	
10210*	TT-QC 2000	1" Square Female	200–2000	271.2–2712	28–276.5	

*Cable included. All other transducers require additional cable (P/N 10293).

TT-L Series Transducers

- Built-in L-bracket for mounting vertically or horizontally.
- Requires detachable cable Part No. 10293.
- Mounting holes drilled for 5/16" bolts, 3.25" on center.



TT-L Series			Torque Range			
Part No.	Model	Drive	in.ozs.	in.lbs.	cNm	kgf•Cm
10257	TT-L 10I	.25" Hex Male	16–160	1–10	11.3–113	1.15–11.5
Part No.	Model	Drive	in.lbs.	ft. lbs	Nm	kgf. Cm
10258	TT-L 50I	.25" Hex Male	5–50	.4–4	.56–5.6	5.6–57
10259	TT-L 100I	.375" Hex Male	10–100	.83–8.3	1.13–11.3	11.5–115
10260	TT-L 300I	.375" Hex Male	30–300	2.5–25	3.4–34	34.5–345
10261	TT-L 80	.5" Square Female	96–960	8–80	10.8–108.5	110.6–1106
10262	TT-L 150	.5" Square Female	180–1800	15–150	20.3–203.4	207.4– 2073.8
10263	TT-L 250	.75" Square Female	300–3000	25–250	34–340	345.6–3456.4
Part No.	Model	Drive	ft. lbs.	Nm	Kgf. M	
10264	TT-L 600	.75" Square Female	60–600	81.3–813.5	8.3–83	

*Cable included. All other transducers require additional cable (P/N 10293).

Torq-Tronics 2[®]

Digital Torque Tester Series



The new Torq-Tronics 2 with Fail Safe Engineering takes your quality to a new level.

Accuracy of 0.5% (indicated value) from 10% to 100% of capacity and Torq-Tronics 2 capabilities provide greater control of your torque testing program.

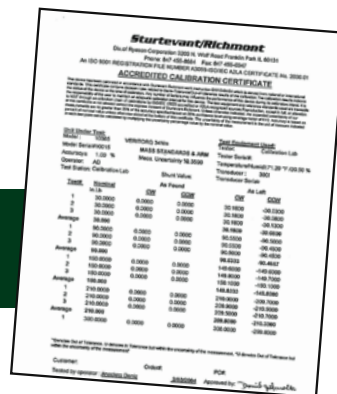
The new Torq-Tronics 2[®] line of Digital Torque Testers is ideal for interim or daily torque testing programs for clicker torque wrenches, camover torque tools, torque screwdrivers, and non-impact power tools.

- Greater accuracy and durability with simplicity and ease of operation
- Highly visible display in any lighting
- 6 digit floating decimal point for superior resolution

Like all Sturtevant Richmond products, Torq-Tronics 2 meets or exceeds the following International and American standards:

- ASME B107.300 - 2010 Electronic Tester, Hand Torque Tools
- ISO 5393 Rotary tools for threaded fasteners- Performance test methods.
- ASME B107.4M Driving and Spindle Ends for Portable Hand, Impact, Air, and Electric Tools (Percussion Tools Excluded).
- ISO 1773 Assembly Tools for Bolts and Screws – Driving Squares for Power Socket Wrenches and Hand Socket Wrenches.
- ISO 1774-2 Assembly Tools for Bolts and Screws – Driving Squares for power socket tools

Includes FREE calibration certificate from our ISO/IEC 17025 Accredited Laboratory.



Features and Characteristics

- Accuracy of +/- .5% of Indicated Value from 10% to 100% of rated capacity. Meets or exceeds requirements of ASME B107.300-2010.
- Tests in both clockwise and counterclockwise directions.
- Four modes of operation - Track, Peak, Initial Peak and Power Tool.
- Units of measure include English, Standard International and metric.
- Units of 300 inch-pound (34 Nm) capacity and below are optimized for bench mounting; larger units may be mounted vertically or horizontally for better safety and efficiency.
- With only 8 buttons Torq-Tronics 2[®] is amazingly simple to operate!
- Memory stores up to 999 records that can be downloaded to Hyper-Terminal or terminal type program or serial logger program included on the USB stick to create testing reports and data storage.
- Four line vacuum florescent display (VFD) is easy to read.
- Red/Green LED indicates whether a measurement is within the target torque value.
- Built with Fail Safe Engineering.
- Includes 120-240 VAC to 6 VDC screw on power supply for security during power tool testing.
- Runs on four AA NiMH rechargeable batteries. Batteries sold separately. Quick charge unit is available.
- Includes a rugged protective case for storage and transit.
- Power Tool mode has ten filters and will accurately test all clutch type and pulse tools.

Part No.	Model Designation	Description	Drive Size
10691	Torq-Tronics 2 10I	Digital Torque Tester 1 Nm / 10 in.lb	1/4" M Hex
10692	Torq-Tronics 2 50I	Digital Torque Tester 6 Nm / 50 in.lb	1/4" M Hex
10693	Torq-Tronics 2 100I	Digital Torque Tester 12 Nm / 100 in.lb	3/8" M Hex
10694	Torq-Tronics 2 300I	Digital Torque Tester 34 Nm / 300 in.lb	3/8" M Hex
10695*	Torq-Tronics 2 80	Digital Torque Tester 109Nm / 80 ft.lb	1/2" F Sq.
10696*	Torq-Tronics 2 150	Digital Torque Tester 201 Nm / 150 ft.lb	1/2" F Sq.
10697**	Torq-Tronics 2 250	Digital Torque Tester 339 Nm / 250 ft.lb	3/4" F Sq.
10698**	Torq-Tronics 2 600	Digital Torque Tester 814 Nm / 600 ft.lb	3/4" F Sq.

*Comes with .375" or 3/8 inch adapter at no additional charge. - Part number 870777

** Comes with .5" or 1/2 inch adapter at no additional charge. - Part number 870778

Part No.	Model Designation	Description
870776	Adapter, .25" F	Adapter, .25" Female Square to .375" Male Square
870777	Adapter, .375 F	Adapter, .375" Female Square to .5" Male Square
870778	Adapter, .5" F	Adapter, .5" Female Square to .75" Male Square
816261	4 AA NiMH Batteries	4-pack, AA 2300 mAh rechargeable NiMH batteries
21259	Battery Quick Charge Unit	AC powered external battery charging unit & 4 AA NiMH batteries
10599	TTM 4.0	Torque Tool Manager Software
10230	Bracket, Single	Single Stand, holds one Torq-Tronics upright
10231	Bracket, Dual	Dual Stand, holds two Torq-Tronics units upright

Rundown Fixtures RDF

Series

Rundown fixtures assist in testing the output of pulse, stall and clutch power tools. Neither our testers nor our rundown fixtures are designed or suited for impact tools.

Testing pulse and clutch powers tools are accomplished by allowing the tool to achieve rotational speed prior to torque measurement. The rundown fixtures all include components to emulate either a hard or medium joint, thus assuring greater test accuracy.

The rundown fixtures work with Torq-Tronics 2 (+/- .5% Indicated Value) and our new System 8 (+/- .25% Indicated Value) Digital Torque Testers.

Filters and Testing

Both Torq-Tronics 2 and the System 8 digital torque testers have power tool testing filters built. Matching tool capacity, rundown fixture capacity, and the transducer capacity is the basis for creating accurate test results.

Part No.	Model Designation	Description	Drive Size
10349	RDF 1 Nm	Rundown Fixture, 1 Nm/10 in lb capacity	1/4" Female Hex
10350	RDF 3 Nm	Rundown Fixture, 3 Nm/25 in lb capacity	1/4" Female Hex
10351	RDF 6 Nm	Rundown Fixture, 6 Nm/50 in lb capacity	1/4" Female Hex
10352	RDF 17 Nm	Rundown Fixture, 17 Nm/150 in lb capacity	3/8" Female Hex
10353	RDF 34 Nm	Rundown Fixture, 34 Nm/300 in lb capacity	3/8" Female Hex
10354	RDF 34 Nm	Rundown Fixture, 34 Nm/300 in lb capacity	1/2" Male Square
10355	RDF 68 Nm	Rundown Fixture, 68 Nm/600 in lb capacity	1/2" Male Square
10356	RDF 109 Nm	Rundown Fixture, 109 Nm/960 in lb capacity	1/2" Male Square
10357	RDF 204 Nm	Rundown Fixture, 204 Nm/1800 in. lb. capacity	1/2" Male Square
10358	RDF 339 Nm	Rundown Fixture, 339 Nm/3000 in. lb. capacity	3/4" Male Square

Torque Tool Manager Software TTM 4.0

Calibration & Certification Software

Torque Tool Manager 4.0 (TTM 4.0) is calibration and certification software specifically engineered to work with our System 8, Torq-Tronics 2 or your legacy System 4/5, System 6, or Torq-Tronics Digital Torque Testers!

TTM 4.0 software will fulfill your TS 16949 and ISO calibration requirements far more cost-effectively than manual record keeping systems!

- Choose from standard calibration routines or customize your own to assure proper test procedures and accuracy - every time! TTM is flexible; it accommodates the full range of manual and power torque tools.
- TTM 4.0 error-proofs calibration procedures and virtually eliminates retesting due to operator error! TTM 4.0

downloads the proper test protocol to your SR tester and sets the tester up for the tool. It will only accept results that are in line with the test protocol, so errors resulting from failure to follow the programmed procedure are automatically rejected.

- TTM 4.0 keeps records for each tool, including calibration date, serial number, tester and transducer serial numbers, operator, "As Found" and "As Left" test results, NIST traceability numbers, and all other data required for ISO and QS compliance!

Contact customer service via email at customerservice@sr torque.com



Mechanical Loaders

ML Series

A mechanical loader is the perfect accessory to increase the repeatability and productivity of the System 8 or legacy System 4/5/6! The drive system for each loader assures 90 degree load application, reducing operator-induced test error. The loaders' mechanical advantage reduces the operator effort required to attain and sustain torque during the calibration process. The QC Series transducers include adapter plates for use with the ML 1000 and ML 2000 loaders, and make changeover a matter of seconds. SR mechanical loaders meet or exceed requirements for ASME B107.29M Type 1 loaders.

The Quad Plate permits mounting up to four transducers to the ML 250 or ML 600 to facilitate changeover. When coupled with the Transducer Switch Module both mechanical and electrical changeover can be accomplished in seconds!



Mechanical Loaders & Tester Accessories

Part No.	Model Designation	Description	Drive Size
10168	ML 2000	Mechanical Loader, 2000 ft.lb./2710 Nm capacity	1/4" Female Hex
10167	ML 1000	Mechanical Loader, 1000 ft.lb./1355 Nm capacity	1/4" Female Hex
10431	ML 600	Mechanical Loader, 600 ft.lb./813 Nm capacity	1/4" Female Hex
10160	ML 250	Mechanical Loader, 250 ft.lb./338 Nm capacity	3/8" Female Hex
10208	Lg. Cart	Roller Cart for ML 1000, 64"W x 30"D x 30"H	3/8" Female Hex
10161	Std. Cart	Roller Cart for ML 250, 46"W x 24"D x 46"H	1/2" Male Square
10308	Quad Plate	Rotating plate attaches four -P Transducers to ML 250.	1/2" Male Square
10601	Switch Box	Electrically connects four transducers to System 8	1/2" Male Square

We supply the weights, arms, wheels, and levers for the top calibration professionals. To known uncertainty budget, we can provide you weights corrected for your specific gravity. For more information see our website, the Newton Metre channel on YouTube, or worldwide please call: +1-847-455-8677 to schedule your free consultation.



Digital Torque Tester

VeriTorq®

Series



- Operation Modes: Track, Peak, and Initial Peak accommodates testing clicker, cam-over, and torque screwdriver testing.
- Clockwise and counter-clockwise test capability supports daily verification, immediate results, and eliminates un-needed calibrations.
- +/- 1% Indicated Value Accuracy from 10% to 100% of capacity.
- Units of measure include English, Standard International, and metric.
- Integral "L" bracket for horizontal or vertical mounting.
- Electronics Module rotates in two planes.
- Large LCD and rotating Electronics Module make it easy to read regardless of wrench length or technician height.
- Serial port for immediate or batch data transfer with terminal program
- Easy programming via our button control panel
- Meets or exceeds ASME B 107.29M.
- Includes FREE calibration certificate from our ISO/IEC 17025 Accredited Laboratory.
- Made in USA by ISO 9001 manufacturer!
- Rugged protective case and power supply included.
- Savings in calibration fees can pay for tester in less than a year.



All VeriTorq® Digital Torque Testers Include:

- 120 VAC or 240 VAC to 6 VDC Converter
- Custom Plastic Carrying/ Shipping Case
- Serial Cable
- Quick Start Instructions
- 1-Year Warranty on Electronics
- Includes FREE certification from our ISO/IEC 17025 Accredited calibration laboratory.

Part No.	Model	Description
10363	VeriTorq® 6 Nm/50 in.lbs.- 120 VAC	.25" Male Hex
10364	VeriTorq® 12 Nm/100 in.lbs.- 120 VAC	.375" Male Hex
10365	VeriTorq® 34 Nm/300 in.lbs.- 120 VAC	.375" Male Hex
10366	VeriTorq® 109 Nm/80 ft.lbs.- 120 VAC	.5" Female Square*
10367	VeriTorq® 201 Nm/150 ft.lbs.- 120 VAC	.5" Female Square*
10368	VeriTorq® 339 Nm/250 ft.lbs.- 120 VAC	.5" Female Square*
10369	VeriTorq® 814 Nm/600 ft.lbs.- 120 VAC	.75" Female Square**
10372	VeriTorq® 6 Nm/50 in.lbs.- 240 VAC	.25" Male Hex
10373	VeriTorq® 12 Nm/100 in.lbs.- 240 VAC	.375" Male Hex
10374	VeriTorq® 34 Nm/300 in.lbs.- 240 VAC	.375" Male Hex
10375	VeriTorq® 109 Nm/80 ft.lbs.- 240 VAC	.5" Female Square*
10376	VeriTorq® 201 Nm/150 ft.lbs.- 240 VAC	.5" Female Square*
10377	VeriTorq® 339 Nm/250 ft.lbs.- 240 VAC	.5" Female Square*
10378	VeriTorq® 814 Nm/600 ft.lbs.- 240 VAC	.75" Female Square**

* Includes .5" M Square to .375" F Square Adapter.

** Includes .75" M Square to .5" F Square and .5" M Square to .375" F Square adapters.

SR Product Warranties

Warranty

Sturtevant Richmond Division of Ryeson Corporation warrants all products in this catalog against defective material and workmanship for the periods given in the table. Upon inspection, Sturtevant Richmond shall have the option to repair or replace the defective product and such repair or replacement, free of charge, shall be the Customer's sole and exclusive remedy. Sturtevant Richmond Division of Ryeson Corporation furnishes this limited warranty in lieu of all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose. Any and all warranties shall be void as to products damaged or rendered unserviceable while in the custody of the customer or third parties. This includes but is not limited to negligence, misuse, modification, repair or alteration of the product.

Please note: Use only NiMH 1.25 volt rechargeable batteries in your test instruments. Using 1.5 volt alkaline disposable batteries will damage your test instrument or create inaccurate readings, damage your torque testing/calibration instrument and VOID your warranty.

Product Family

Warranty Duration

(from date of purchase)

Torque Transducers	1 year
Torque Testers	1 year
Mechanical Loading Systems	5 years
Calibration Arms	5 years
Load Platforms, Weights	5 years
Software	90 days
All other products	1 year

Liability

Sturtevant Richmond Division of Ryeson Corporation shall not be liable for any damages, incidental, consequential, or otherwise, or commercial loss from any causes, nor for personal injury or property damage. Sturtevant Richmond Division of Ryeson Corporation's liability is limited to the repair or replacement of defective material or workmanship of the product.

Factory Repair & Calibration

Torque wrenches, torque screwdrivers, torque testers – all are precision measurement instruments. You rely on each to assure the quality of your products, which means that tool and tester uptime and calibration are critical to your business.

We offer our customers factory-quality repair using original SR parts, and calibration in our ISO/IEC 17025 Accredited Laboratory. There is no better level of repair available anywhere, and you can rely on our calibration process to assure you are working with accurate tools and testers.

Contact us by phone, fax, or e-mail to discuss your repair and calibration needs for all SR products.

World wide: +1 847-455-8677
In US only, toll-free: 800-877-1347
Fax: 847-455-0347

email: customerservice@srtorque.com

General Information

Certification

All SR torque testers, torque wrenches (except dial wrenches and preset tools) and torque screwdrivers are certified in our ISO/IEC 17025:2005 A2LA accredited laboratories. Below is a flow chart depicting SR traceability to the National Institute of Standards and Testing (N.I.S.T.) which has reciprocity with all major standards bodies.

Specifications and Dimensions

All specifications and dimensions contained in this catalog are subject to change without notice. Please contact the factory for the latest information.

Safety

The following precautions should always be taken when using any hand tool to avoid possible injury:

- Safety glasses or goggles should be worn at all times when using any hand tool.

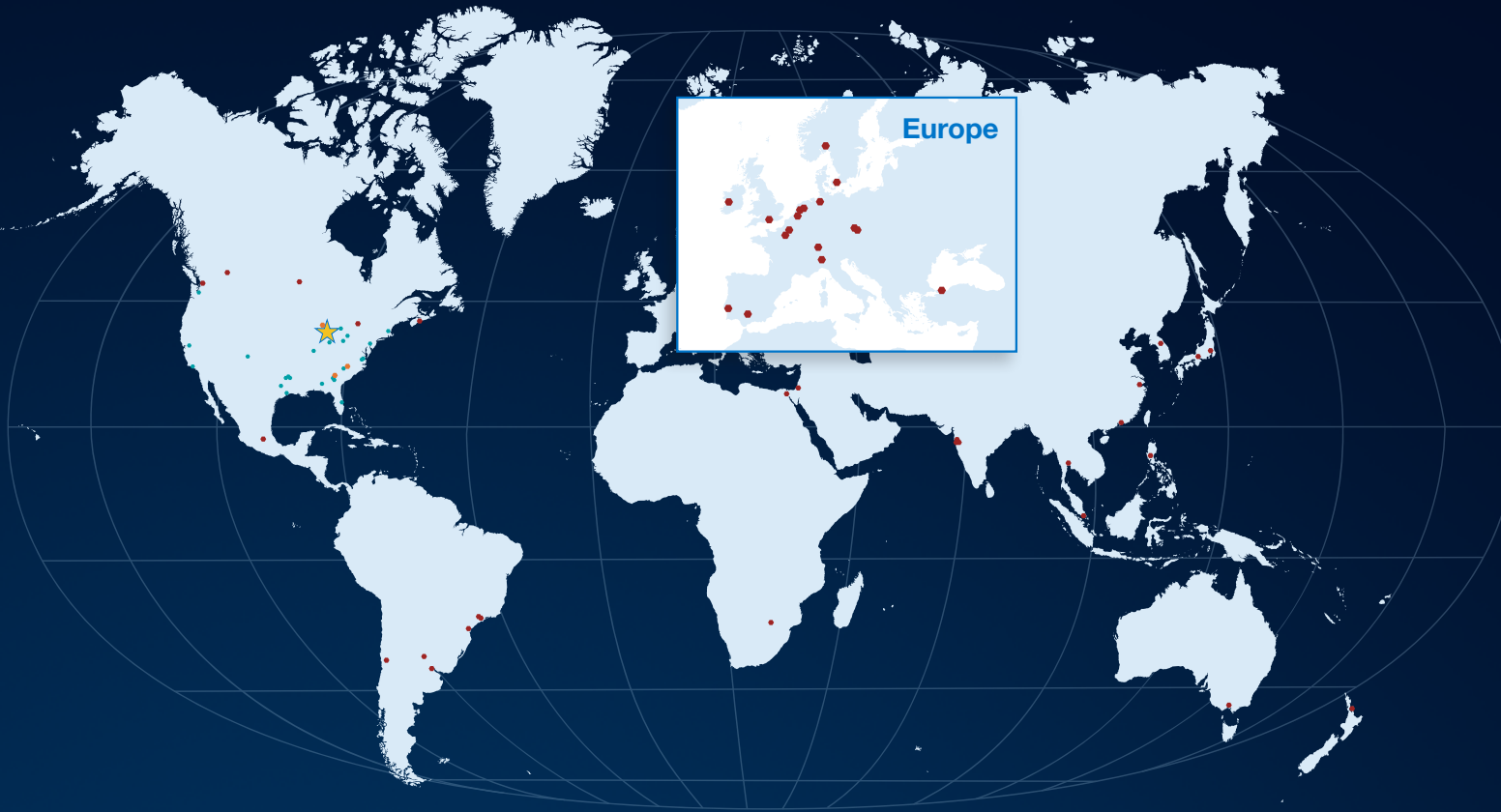
- Be sure wrench or socket is properly seated on the nut prior to applying torque.
- A "cheater bar" should never be used on a torque wrench to apply excess leverage.
- Firm footing and proper position are both extremely important when applying torque.

For extensive information on the safe use of hand tools and for safety programs visit www.hti.org.

Organizations

SR is a member of ISA the Industrial Supply Association and HTI the Hand Tool Institute.





ISO 9002 Registered August 19, 1994

ISO 9001 Registered May 8, 2001

ISO 17025 Accredited October 23, 2003

★ Headquarters

● Sales Offices

● Sales Representatives

● International Distributors

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Distributors cover all 50 states



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Accurate. Reliable. Durable. TOOLS YOU TRUST.

Sturtevant Richmond is a leader in the torque tool industry starting with the very first torque wrench invented in 1924. Today, we manufacture manual, digital and wireless torque wrenches, screwdrivers, robust calibration and test equipment, and wireless torque monitors and controls for organizations that need to apply accurate, precise torque to their manufacturing, maintenance and repair operations.

Our products have always been manufactured in the USA, by union workers.

