Please Note Our Catalog Format Has Changed!

To provide you with more current information we have created separate catalogs for Wireless Torque Tools, Verification and Calibration Equipment and our Basic Tools Catalog. (You are currently viewing our Basic Tools Catalog.)

The Wireless Torque Tools Catalog will be released in Summer 2014 and the Verification and Calibration Catalog will be released in Fall 2014.

Sturtevant Richmont®

Torque Application & Audit Tools

www.srtorque.com

ISO/IEC 17025 Accredited Calibration Laboratory / ISO 9001:2008 Registered Company

Welcome!

For more than seventy years we have built our torque tools solely to meet the demands of the industrial user. For decades Sturtevant Richmont tools have been used for critical assemblies on aircraft, cars, trucks, and off road equipment. Our customers demand durability, reliability, accuracy and innovation and because we provide that, our customers tend to stay with us long term.

More than seventy years ago P.A.Sturtevant introduced the original deflecting beam torque wrench and shortly thereafter Frank Livermont designed, manufactured and sold the first "clicker" type torque wrench. Their two companies were eventually bought and combined into one. The late John L. Reynertson, aware of the rich history and company potential, purchased Sturtevant Richmont and guided it through a very successful revival of innovation and a singular devotion to the manufacture of the highest quality torque products. The relentless focus on innovation and quality has resulted in a string of firsts in our industry. These include, fully automated torque testers, microprocessor based torque testers, utilization of software for hands free torque testing, ISO 9001 Registration, ISO/IEC 17025 Accreditation, supplying certificates of calibration with all tools and successful RF transmission of data within manufacturing facilities. With more than forty torque related patents to our credit, we continue to develop more innovative tools and torque systems to help our customers.

Because our sole focus is on torque, we are the only independent full line torque products manufacturing company in the U.S. Unlike our competitors, torque is not a small part of what we sell, it is all we sell.

Because we spend a lot of time with customers in their offices and out on their shop floor we take a systems approach to your torque applications, which is unlike all others. Our sales force has the training and complete range of products to help you develop torque management systems to make your products and processes better. We do not "sell tools," we provide solutions.

Over the last twenty-five years many things have changed at S/R including products, processes, machinery and even the location but a headline from one of our earliest ads is as valid now as it was then. "Your quality is our business."

As lean manufacturing has progressed and quality has emerged as a competitive advantage, demand for our tools has increased. We continually invest and innovate to create faster design to market times and more efficient production times.Our goal over the last 70+ years has not been to be the largest torque tool company. Our focus has always been to produce the highest quality torque products You can buy other torque tools for less money, but you cannot buy better torque tools.

Sincerely

Raymond R. Reynertson
President & CEO

John L. Reynertson Jr.
Vice President Engineering

Donald J. Reynertson
Vice President of Sales

Global Reach... Local Support.

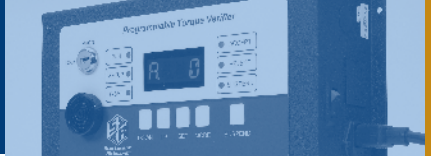
Worldwide Sales Representation
S/R has trained and experienced representatives in 25 countries spanning four continents. This extensive network assures that you will receive the same level of service at virtually any manufacturing location you may develop or acquire.

24 x 7 Support via the Web
The S/R website – www.srtorque.com – provides immediate support and answers to your questions, 24 hours a day, 7 days a week. We are continually upgrading and expanding the information on our products, applications and how to obtain the greatest possible return on your investment from S/R products. From software to parts diagrams, product data to torque strategy options, the answers you seek will most likely be found at www.srtorque.com.

Our Quality is Your Assurance
ISO 9001:2008 and ISO/IEC 17025:2005
All S/R products manufactured in our Carol Stream facility are built within an ISO 9001 Registered Quality System and calibrated in our ISO/IEC 17025 Accredited Laboratories. Our focus on torque measurement ensures that you have the most advanced systems available for all your needs from initial process design, assembly, calibration, maintenance through field service.

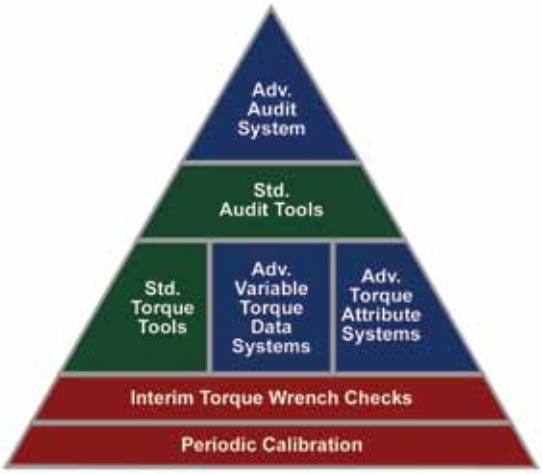
Corporate Headquarters
Located in Carol Stream, Illinois a western suburb of Chicago and in close proximity to O'Hare Airport we are able to provide our customers with the service so important for today's business climate.

International: (011)847.455.8677
Domestic: 800.877.1347
Fax: 847-455-0347
email: customerservice@srtorque.com

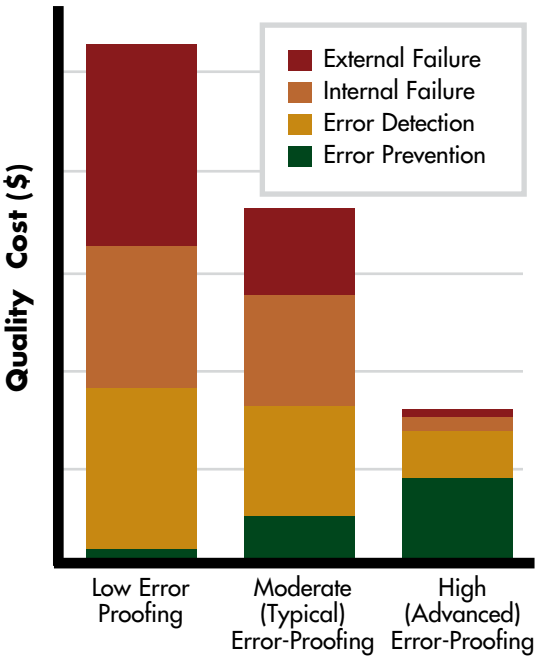


Torque Management & Cost Control

Torque Management Pyramid



Relationship of Torque Control to Ongoing Quality Costs



Sound torque management leads directly to measurable profit improvement.

The relationship between sound torque management practices and profitability in assembly operations proves itself repeatedly in thousands of plants every month. Products assembled with threaded fasteners are dependent upon appropriate torque management for product quality. Optimizing the process vastly reduces all categories of nonconformance costs and the savings go directly to your bottom line. Not as readily measurable, but of equal or even greater impact, is the increased level of customer satisfaction that affects your product image, brand name, and sales volume.

Regardless of the term you choose – "Error-Proofing" or "Poka-Yoke" or "Robust Process" – the process objectives remain the same. The fastener tightening process must be as close to immune to error as possible, while retaining high throughput rates.

Torque management systems and equipment have made incredible advancements in this area in the last five years. In fact, the pace of change has been revolutionary. This diversity of new systems and equipment permits optimizing your process for quality, while sustaining or increasing throughput leading to remarkable ROI's for your investment.

The chart on the left is typical of the experience of our customers who have invested in optimizing their torque management. Decreases of 50% - 90% in internal and external nonconformance costs are frequently the result when appropriate torque management systems are designed and implemented.

Our Torque Management Pyramid graphic is provided as a tool to assist you in developing your thoughts about your current process, and how that process might be managed to improve your profitability. Our phone number, 847/455-8677, is provided to get you there.

Torque Application Tools

For Assembly, Auditing, and Maintenance

The focus on quality for manufactured products over the last 25 years has been nothing short of extraordinary. One of the areas receiving significant attention has been on assemblies that require threaded fasteners.

There are numerous ways a product can be assembled but if the need exists to disassemble the product, the use of threaded fasteners remains the most cost effective and popular method of assembly. To ensure the integrity of an assembly using threaded fasteners, the proper application of torque is the method of choice.

In this catalog you will find the broadest array of torque application tools available worldwide. The basic categories consist of preset tools for repetitive assembly operations, micrometer adjustable tools for assembly and maintenance and direct reading tools for assembly, maintenance and auditing.

If you are not sure of the tools you need after reviewing the following section, please visit our website at www.srtorque.com and go to the Torque Application Selection Chart or call us at Domestic 800.877.1347 or International (011)847.455.8677.

Torque Application Tools

Micrometer Adjustable

Fixed Ratchet SDR Series

SDR Series Features

- Wrench is adjustable to torque value by rotating grip.
- Simple thumbscrew mechanism locks handle to avoid changing torque value while in use.
- Fast adjustment–takes the fewest rotations of any tool to reach full scale!
- Ball bearing rockover assembly assures smooth operation, enhances repeatability and increases the cycle life of the wrench.
- At preset torque value a strong audible and tactile impulse is emitted.
- Neoprene rubber grip for cushioning and oil/chemical resistance.
- Includes custom molded plastic case.
- Aluminum increment band is color coded: black for inch lbs.; gold for foot lbs.; blue for Newton metre.
- Ratchet design is very strong and durable.
- Accuracy of +/- 4% Indicated Value (from 20% to 100% of capacity) meets or exceeds ASME B107.300 , ISO 6789, and AS 28431.
- Includes FREE ISO/IEC 17025 tabulated certification!

SDR Fixed Ratchet Head Series - English

Part Number	Model	Torque Capacity	Steps of Graduations	Square Drive	Overall Length (in.)
810749	2 SDR 50I	10-50 in. lbs.	1 in. lb.	¼ in.	10.1
810750	2 SDR 150I	30-150 in. lbs.	2 in. lbs.	¼ in.	10.1
810751	3 SDR 150I	30-150 in. lbs.	2 in. lbs.	⅜ in.	10.6
810761	3 SDR 200I	40-200 in. lbs.	2 in. lbs.	⅜ in.	10.7
810748	3 SDR 600I	100-600 in. lbs.	5 in. lbs.	⅜ in.	14.0
810752	3 SDR 750I	150-750 in. lbs.	5 in. lbs.	⅜ in.	14.0
810756	3 SDR 75	15-75 ft. lbs.	½ ft. lb.	⅜ in.	14.0
810747	3 SDR 1200I	200-1200 in. lbs.	10 in. lbs.	⅜ in.	17.6
810754	3 SDR 100	20-100 ft. lbs.	1 ft. lb.	⅜ in.	17.6
810755	4 SDR 1800I	300-1800 in. lbs.	10 in. lbs.	½ in.	18.3
810757	4 SDR 150	30-150 ft. lbs.	1 ft. lb.	½ in.	18.3
810758	4 SDR 250	50-250 ft. lbs.	2 ft. lbs.	½ in.	24.3
810760	6 SDR 300	50-300 ft. lbs.	2½ ft. lbs.	¾ in.	29.0
810597	6 SDR 600*	100-600 ft. lbs.	5 ft. lbs.	¾ in.	39.2
810525	6 SDR 700**	100-700 ft. lbs.	5 ft. lbs.	¾ in.	39.2

SDR Fixed Ratchet Head Series - Newton Metre

Part Number	Model	Torque Capacity	Steps of Graduations	Square Drive	Overall Length (in.)
810774	2 SDR 6 Nm	1-6 Nm	.1 Nm	¼ in.	10.1
810775	2 SDR 20 Nm	4-20 Nm	.2 Nm	¼ in.	10.1
810776	3 SDR 20 Nm	4-20 Nm	.2 Nm	⅜ in.	10.6
810782	3 SDR 50 Nm	10-50 Nm	.5 Nm	⅜ in.	14.6
810777	3 SDR 100 Nm	20-100 Nm	.5 Nm	⅜ in.	14.6
810797	4 SDR 100 Nm	20-100 Nm	.5 Nm	½ in.	14.6
810783	3 SDR 140 Nm	28-140 Nm	1 Nm	⅜ in.	17.9
810798	4 SDR 140 Nm	28-140 Nm	1 Nm	½ in.	17.9
810778	4 SDR 200 Nm	40-200 Nm	1 Nm	½ in.	18.5
810779	4 SDR 300 Nm	60-300 Nm	2 Nm	½ in.	24.3
810789	6 SDR 300 Nm	60-300 Nm	2 Nm	¾ in.	24.3
810598	6 SDR 800 Nm*	160-800 Nm	5 Nm	¾ in.	39.2

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

Micrometer Adjustable

Fixed Square Drive
SD Series

SD Series Features

- Wrench is adjustable to torque value by rotating grip.
- Simple thumbscrew mechanism locks handle to avoid changing torque value while in use.
- Fast adjustment–takes the fewest rotations of any tool to reach full scale!
- Ball bearing rockover assembly assures smooth aperation, enhances repeatability and increases the cycle life of the wrench.
- When preset torque value is reached a strong audible and tactile impulse is emitted.
- Neoprene rubber grip for cushioning and oil/chemical resistance.
- Includes custom molded plastic case.
- Aluminum increment band is color coded: black for inch lbs.; gold for foot lbs.; blue for Newton metre.
- Accuracy of +/- 4% Indicated Value (from 20% to 100% of capacity) meets or exceeds ASME B107.300, ISO 6789, and AS 28431.
- Includes FREE ISO/IEC 17025 tabulated certification!

SD Fixed Male Square Drive Head Series - English

Part Number	Torque Model	Steps of Capacity	Graduations	Square Drive	Overall Length (in.)
810160	2 SD 50I	10-50 in. lbs	1 in. lb.	¼ in.	9.4
810161	2 SD 150I	30-150 in. lbs	2 in. lb.	¼ in.	9.4
810159	3 SD 200I	40-200 in. lbs	2 in. lb.	⅜ in.	9.4
810163	3 SD 750I	150-750 in. lbs	5 in. lb.	⅜ in.	13.6
810167	4 SD 150	30-150 ft. lbs	1 ft. lb.	½ in.	17.0
810600	6 SD 600*	100-600 ft. lbs	5 ft. lb.	¾ in.	36.4

SD Fixed Male Square Drive Head Series - Newton Metre

Part Number	Torque Model	Steps of Capacity	Graduations	Square Drive	Overall Length (in.)
810601	6 SD 800 Nm*	160-800 Nm	5 Nm	¾ in.	36.4

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

Carry and Storage Cases

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

Part Number	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.

Preset

Fixed Ratchet LTCR Series

LTCR Series Features

- 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 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.

LTCR Fixed Ratchet Head Series

Part Number	Model	Torque Capacity*	Square Drive	Weight (lbs.) Length (in.)
810400	LTCR 50I	50 in. lbs./6 Nm/ 58 kgf•cm	¼ in.	0.5 7.3
810401	LTCR 150I	150 in. lbs./17 Nm/ 173 kgf•cm	¼ in.	0.5 7.3
810589	LTCR 150I	150 in. lbs./17 Nm/ 173 kgf•cm	⅜ in.	0.5 7.9
810058	LTCR 300I	300 in. lbs./34 Nm/ 346 kgf•cm	⅜ in.	1.0 10.4
810055	LTCR 750I	750 in. lbs./85 Nm/ 864 kgf•cm	⅜ in.	1.25 14.8
810060	LTCR 750I	750 in. lbs./85 Nm/ 864 kgf•cm	½ in.	1.25 14.8
810402	LTCR 1200I	1200 in. lbs./100 ft. lbs./ 136 Nm/14 kgf•m	⅜ in.	1.5 17.6
810056	LTCR 1800I	1800 in. lbs./150 ft. lbs./ 204 Nm/21 kgf•m	½ in.	1.75 18.3
810059	LTCR 3000I	3000 in. lbs./250 ft. lbs./ 339 Nm/35 kgf•m	½ in.	3.0 22.9
810430	LTCR 3000I	3000 in. lbs./250 ft. lbs./ 339 Nm/35 kgf•m	¾ in.	3.0 22.9
810138	LTCR 3600I	3600 in. lbs./300 ft. lbs./ 407 Nm/41 kgf•m	¾ in.	7.75 27.4
810151	LTCR 7200I**	7200 in. lbs./600 ft. lbs./ 813 Nm/83 kgf•m	¾ in.	10.0 37.4

* Minimum capacities of preset tools can be calculated at 20% of full capacities.
** Optional extension tube, Part # 853363, can be ordered. Use of the extension requires recalibration of wrench.

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

LTCS Series Features

- 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 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.
- Can be ordered preset from the factory or torque tester can be used to set torque value.
- Adjustments to torque settings can only be made with a Combination Adjusting and Release Tool (CART) to prevent tampering on the production line.

Preset

Fixed Square Drive
LTCS Series

LTCS Fixed Male Square Drive Head Series

Part Number	Model	Torque Capacity*	Square Drive	Weight (lbs.) Length (in.)
810168	LTCS 50I	50 in. lbs./6 Nm/ 58 kgf•cm	¼ in.	0.5 6.8
810170	LTCS 150I	150 in. lbs./17 Nm/ 173 kgf•cm	⅜ in.	0.5 6.8
810171	LTCS 300I	300 in. lbs./34 Nm/ 346 kgf•cm	⅜ in.	1 9.4
810172	LTCS 750I	750 in. lbs./85 Nm/ 864 kgf•cm	⅜ in.	1.25 13.3
810174	LTCS 1800I	1800 in. lbs./150 ft. lbs. 204 Nm/21 kgf•m	½ in.	1.5 16.9
810485	LTCS 3600I	3600 in. lbs./300 ft. lbs./ 407 Nm/41 kgf•m	¾ in.	5.5 25.1
810153	LTCS 7200I**	7200 in. lbs./600 ft. lbs./ 813 Nm/83 kgf•m	¾ in.	8.25 35.1

* Minimum capacities of preset tools can be calculated at 20% of full capacities.
** Optional extension tube, Part # 853363, can be ordered. Use of the extension requires recalibration of wrench.

Combination **A**djusting and **R**elease **T**ool **(CART 819117)** allows operator to easily adjust torque on all SLTC, SLTC-FM, LTC, LTCR and LTCS wrenches.

Preset **H**andle **E**xtension **(P/N 853601)** is available to increase reach for limited-access applications for wrenches of 3000 in.lb. capacity and below!

Interchangeable Head Micrometer Adjustable

CCM Series

CCM Series Features

- Incredible Versatility! Accepts 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, AS 28431 and ISO 6789.
- Fast adjustment–takes the fewest rotations of any tool to reach full scale!
- Comes with FREE ISO/IEC 17025 calibration certificate!
- Neoprene rubber grip offers oil and chemical resistance, as well as cushioning and firm grip for excellent ergonomics!
- 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!
- Bi-directional versatility obtained by simply removing head, turning wrench over, and replacing head.
- Aluminum increment band is color-coded: black for inch-pounds, gold for foot-pounds, and blue for Nm.

CCM Dovetail Head Series — English

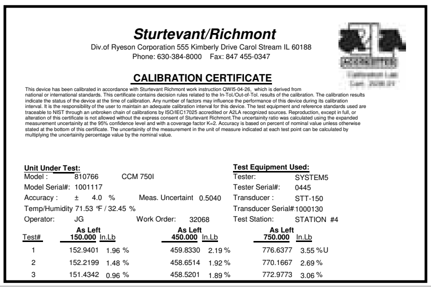
Part Number	Model	Torque Capacity		Steps of Graduations		Overall Length (in.)
810769	CCM 50I	10-50	in. lbs.	1	in. lb.	9.0
810765	CCM 150I	30-150	in. lbs.	2	in. lbs.	9.0
810763	CCM 600I	100-600	in. lbs.	5	in. lbs.	12.8
810766	CCM 750I	150-750	in. lbs.	5	in. lbs.	12.8
810770	CCM 75	15-75	ft. lbs.	½	ft. lb.	12.8
810764	CCM 1200I	200-1200	in. lbs.	10	in. lbs.	16.3
810762	CCM 1800I	300-1800	in. lbs.	10	in. lbs.	16.3
810771	CCM 150	30-150	ft. lbs.	1	ft. lb.	16.3
810335	CCM 300†	50-300	ft. lbs.	2½	ft. lbs.	26.0
810772	CCM 400†	50-400	ft. lbs.	5	ft. lbs.	36.0

CCM Dovetail Head Series — Newton Metre

Part Number	Model	Torque Capacity		Steps of Graduations		Overall Length (in.)
810784	CCM 6 Nm	1-6	Nm	.1	Nm	9.0
810785	CCM 20 Nm	4-20	Nm	.2	Nm	9.0
810786	CCM 100 Nm	20-100	Nm	.5	Nm	12.8
810787	CCM 200 Nm	40-200	Nm	1	Nm	16.3
810788	CCM 400 Nm†	75-400	Nm	2.5	Nm	26.0
810794	CCM 600 Nm†	100-600	Nm	5	Nm	36.0

† Wrenches calibrated for use with heads having 3⅞″ common centerline.
On request wrenches can be calibrated for 1⁷⁄₁₆″ centerline.

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



Sturtevant/Richmont
Div.of Ryeson Corporation 555 Kimberly Drive Carol Stream IL 60188
Phone: 630-384-8000 Fax: 847 455-0347

CALIBRATION CERTIFICATE

This device has been calibrated in accordance with Sturtevant Richmont work instruction QWI5-04-26, which is derived from national or international standards. This certificate contains decision rules related to the In-Tol./Out-of-Tol. results of the calibration. The calibration results indicate the status of the device at the time of calibration. Any number of factors may influence the performance of this device during its calibration interval. It is the responsibility of the user to maintain an adequate calibration interval for this device. The test equipment and reference standards used are traceable to NIST through an unbroken chain of calibrations by ISO/IEC17025 accredited or A2LA recognized sources. Reproduction, except in full, or alteration of this certificate is not allowed without the express consent of Sturtevant Richmont.The uncertainity ratio was calculated using the expanded measurement uncertainity at the 95% confidence level and with a coverage factor K=2. Accuracy is based on percent of nominal value unless otherwise stated at the bottom of this certificate. The uncertainity of the measurement in the unit of measure indicated at each test point can be calculated by multiplying the uncertainity percentage value by the nominal value.

Unit Under Test:
Model : 810766 CCM 750I
Model Serial#: 1001117
Accuracy : ± 4.0 % Meas. Uncertaint 0.5040
Temp/Humidity 71.53 °F / 32.45 %
Operator: JG Work Order: 32068

Test Equipment Used:
Tester: SYSTEM5
Tester Serial#: 0445
Transducer : STT-150
Transducer Serial# 1000130
Test Station: STATION #4

Test#	As Left 150.000 In.Lb		As Left 450.000 In.Lb		As Left 750.000 In.Lb	
1	152.9401	1.96 %	459.8330	2.19 %	776.6377	3.55 %U
2	152.2199	1.48 %	458.6514	1.92 %	770.1667	2.69 %
3	151.4342	0.96 %	458.5201	1.89 %	772.9773	3.06 %

Interchangeable Head Preset

LTC Series

LTC Series Features

- 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 and ISO 6789, and provides the quality your customers demand!
- The pin lock assures positive head connection, yet permits head changeover in seconds!
- Bi-directional versatility obtained by simply removing head, turning wrench over, and replacing head.
- Extremely versatile system permits use of fewer wrenches by connecting to 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.
- For preset handle extension order PN 853601 for wrenches of 3000 in. lbs. or less.

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

LTC Dovetail Head Series

Part Number	Model	Torque Capacity*	Weight (lbs.)	Overall Length (in.)
810100	LTC 50I	50 in. lbs./6 Nm/ 58 kgf•cm	0.5	6.9
810011	LTC 150I	150 in. lbs./17 Nm/ 173 kgf•cm	0.5	6.9
810574	LTC OHT**	300 in. lbs./34 Nm/ 346 kgf•cm	0.5	6.9
810016	LTC 300I	300 in. lbs./34 Nm/ 346 kgf•cm	0.75	8.8
810013	LTC 750I	750 in. lbs./85 Nm/ 864 kgf•cm	1.0	12.6
810014	LTC 1800I	1800 in. lbs./150 ft. lbs./ 204 Nm/21 kgf•m	1.25	15.9
810054	LTC ERGO	1800 in. lbs./150 ft. lbs./ 204 Nm/21 kgf•m	1.5	19.7
810334	LTC 3600I	3600 in. lbs./300 ft. lbs./ 407 Nm/41 kgf•m	5.5	24.3
810137	LTC 4800I	4800 in. lbs./400 ft. lbs./ 542 Nm/55 kgf•m	8.25	34.3

* Minimum capacities of preset tools can be calculated at 20% of full capacities.
** For this tool only, minimum capacity is 50% of maximum capacity.

Interchangeable Heads

Why Our Customers Say the S/R System is the World's Best

Virtually all interchangeable heads on these pages are made as a single piece from alloy steel. This construction method provides strength and durability rarely attained by the more common cut and weld method. In addition, to achieve constant torque values when changing heads, exact lever length must be maintained. S/R heads share a precise distance from end of wrench to center of fastener. This is referred to as a Common Centerline and is very difficult to maintain when using the welded construction method.

The unique dovetail design used to join head and wrench provides exceptionally strong connection and allows complete interchange-ability. Competing manufacturers find it necessary to increase the size of the mating connection at higher torque values, creating duplication of wrenches and heads while losing interchangeability.

SQUARE DRIVE (SD)

SQUARE DRIVE RATCHET (SDRT)

OPEN END (OE)

SQUARE DRIVE (SD)

1 7/16" Common Centerline

SQUARE DRIVE			
Part Number	Model	Drive Size	Max.Torque (in. lbs.)
819057	SD-¼	¼"	250
819058	SD-⅜	⅜"	1250
819059	SD-½	½"	2500
819119	SD-¾*	¾"	4800

* 3⅞ Common Centerline

SQUARE DRIVE RATCHET (SDRT)

1 7/16" Common Centerline

RATCHET SQ. DR.			
Part Number	Model	Drive Size	Max.Torque (in. lbs.)
809504	SDRT-¼	¼"	250
809505	SDRT-⅜	⅜"	1250
809506	SDRT-½	½"	2500
809507	SDRT-¾*	¾"	4800

* 3⅞" Common Centerline

RATCHET RENEWAL KITS
for ratcheting wrenches and SDRT Heads

- ¼" Ratchet Renewal Kit P/N 816998
- ⅜" Ratchet Renewal Kit P/N 816958
- ½" Ratchet Renewal Kit P/N 816956
- ¾" Ratchet Renewal Kit P/N 816999

OPEN END (OE)

1 7/16" Common Centerline

OPEN END - ENGLISH			
Part Number	Model	Hex Size	Max.Torque (in. lbs.)
819000	OE-¼	¼"	100
819001	OE-5/16	5/16"	150
819002	OE-⅜	⅜"	200
819003	OE-7/16	7/16"	300
819004	OE-½	½"	350
819005	OE-9/16	9/16"	400
819006	OE-⅝	⅝"	600
819007	OE-11/16	11/16"	800
819008	OE-¾	¾"	1000
819009	OE-13/16	13/16"	1250
819010	OE-⅞	⅞"	1500
819011	OE-15/16	15/16"	1750
819012	OE-1	1"	2000
819013	OE-1 1/16	1 1/16"	2250
819014	OE-1⅛	1⅛"	2500
819015	OE-1 3/16	1 3/16"	2750
819016	OE-1¼	1¼"	3000

OPEN END - METRIC			
Part Number	Model	Hex Size	Max.Torque (Nm)
809294	OE-5mm	5mm	8
809290	OE-6mm	6mm	9
809291	OE-7mm	7mm	11
809292	OE-8mm	8mm	16
809293	OE-9mm	9mm	22
819943	OE-10mm	10mm	22
819944	OE-11mm	11mm	34
809226	OE-12mm	12mm	39
819945	OE-13mm	13mm	39
819946	OE-14mm	14mm	45
809227	OE-15mm	15mm	67
819947	OE-16mm	16mm	67
819948	OE-17mm	17mm	90
809228	OE-18mm	18mm	90
819949	OE-19mm	19mm	113
819950	OE-21mm	21mm	141
819951	OE-22mm	22mm	169
819952	OE-24mm	24mm	197
809229	OE-27mm	27mm	254
819956	OE-30mm	30mm	310
819958	OE-32mm	32mm	338

Go to www.srtorque.com for head dimensions.

FLARE NUT (FN)

1 7/16" Common Centerline

FLARE NUT - ENGLISH

Part Number	Model	Hex Size	Max.Torque (in. lbs.)
819025	FN-1/4	1/4"	100
819026	FN-5/16	5/16"	150
819028	FN-7/16	7/16"	250
819029	FN-1/2	1/2"	300
819030	FN-9/16	9/16"	350
819031	FN-5/8	5/8"	400
819033	FN-3/4	3/4"	600
819034	FN-13/16	13/16"	700
819035	FN-7/8	7/8"	800
819036	FN-15/16	15/16"	900
819038	FN-1 1/16	1 1/16"	1050

FLARE NUT - METRIC

Part Number	Model	Hex Size	Max.Torque (Nm)
809243	FN-8mm	8mm	16
809217	FN-9mm	9mm	19
809218	FN-10mm	10mm	22
809221	FN-11mm	11mm	28
809241	FN-12mm	12mm	30
809000	FN-12mm*	12mm	30
809219	FN-13mm	13mm	33
809238	FN-16mm	16mm	50
809223	FN-17mm	17mm	54
809239	FN-18mm	18mm	61
809224	FN-19mm	19mm	68
809240	FN-21mm	21mm	80
809242	FN-22mm	22mm	90
809225	FN-24mm	24mm	105

* 6 pt hex

FLARE NUT (FN)

BOX HEAD (BH)

1 7/16" Common Centerline

BOX HEAD - ENGLISH

Part Number	Model	Hex Size	Max.Torque (in. lbs.)
819060	BH-1/4	1/4"	250
819061	BH-5/16	5/16"	350
819062	BH-3/8	3/8"	450
819063	BH-7/16	7/16"	650
819064	BH-1/2	1/2"	850
819065	BH-9/16	9/16"	1050
819066	BH-5/8	5/8"	1250
819067	BH-11/16	11/16"	1450
819068	BH-3/4	3/4"	1800
819069	BH-13/16	13/16"	2100
819070	BH-7/8	7/8"	2400
819071	BH-15/16	15/16"	2700
819072	BH-1	1"	3000
819073	BH-1 1/16	1 1/16"	3150
819085	BH-1 3/16	1 3/16"	3450
819075	BH-1 1/4	1 1/4"	3600

BOX HEAD - METRIC

Part Number	Model	Hex Size	Max.Torque (Nm)
809301	BH-7mm	7mm	28
809302	BH-8mm	8mm	39
809303	BH-9mm	9mm	50
809230	BH-10mm	10mm	50
809231	BH-11mm	11mm	73
809304	BH-12mm	12mm	96
809232	BH-13mm	13mm	96
809233	BH-14mm	14mm	119
809234	BH-15mm	15mm	141
809305	BH-16mm	16mm	141
809235	BH-17mm	17mm	163
809306	BH-18mm	18mm	163
809236	BH-19mm	19mm	203
809309	BH-20mm	20mm	225
809312	BH-26mm	26mm	355
809307	BH-21mm	21mm	237
809308	BH-22mm	22mm	271
809237	BH-24mm	24mm	305
809352	BH-27mm	27mm	355

BOX HEAD (BH)

HEX DRIVE (HD)

1 7/16" CommonCenterline

HEX DRIVE - ENGLISH

Part Number	Model	Hex Size	Max.Torque (in. lbs.)
819687	HD-3/32	3/32"	30
819691	HD-5/32	5/32"	135
819692	HD-3/16	3/16"	235
819693	HD-7/32	7/32"	340
819694	HD-1/4	1/4"	450
819695	HD-5/16	5/16"	850
819696	HD-3/8	3/8"	850
819697	HD-7/16	7/16"	1450
819699	HD-9/16	9/16"	1450
819701	HD-3/4	3/4"	2400
819702	HD-7/8	7/8"	2700

HEX DRIVE - METRIC

Part Number	Model	Hex Size	Max.Torque (Nm)
809315	HD-4mm	4mm	15
809316	HD-5mm	5mm	27
809317	HD-6mm	6mm	38
809328	HD-8mm	8mm	96
809330	HD-10mm	10mm	141
809339	HD-19mm	19mm	270

Go to www.srtorque.com
for head dimensions.

HEX DRIVE (HD)

Interchangeable Heads

RATCHETING OPEN END (ROE)

RATCHETING OPEN END (ROE)

1 7/16" Common Centerline

Slight disengagement from the fastener allows operator to rapidly rotate wrench.

RATCHETING OPEN END - ENGLISH

Part Number	Model	Hex Size	Max.Torque (in. lbs.)
819201	ROE-5/16	5/16"	90
819203	ROE-7/16	7/16"	180
819204	ROE-1/2	1/2"	210
819205	ROE-9/16	9/16"	240
819206	ROE-5/8	5/8"	360
819208	ROE-3/4	3/4"	600
819209	ROE-13/16	13/16"	750
819210	ROE-7/8	7/8"	900
819215	ROE-1 3/16	1 3/16"	1650

RATCHETING OPEN END - METRIC

Part Number	Model	Hex Size	Max.Torque (Nm)
819219	ROE-9mm	9 mm	13
819220	ROE-10mm	10 mm	13
819221	ROE-11mm	11 mm	20
819222	ROE-12mm	12 mm	23
819223	ROE-13mm	13 mm	23
819224	ROE-14mm	14 mm	27
819226	ROE-16mm	16 mm	40
819227	ROE-17mm	17 mm	54
819228	ROE-18mm	18 mm	54
819229	ROE-19mm	19 mm	68
819231	ROE-22mm	22 mm	101
819232	ROE-24mm	24 mm	118
819233	ROE-27mm	27 mm	152
819234	ROE-28mm	28 mm	170
819235	ROE-29mm	29 mm	152
819238	ROE-32mm	32 mm	203

RATCHETING FLARE NUT (RFN)

RATCHETING FLARE NUT (RFN)

1 7/16" CommonCenterline

Single-direction ratchet for use with hydraulic or pneumatic fittings.

Part Number	Model	Hex Size	Max.Torque (Nm)
819086	RFN-10mm	10 mm	25
819087	RFN-11mm	11 mm	25

STANDARD TOOLING ADAPTER

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 in. 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 in. common centerline.

Part Number	Model	Max.Torque (in. lbs.)
819901	STA-1	1600
819902	STA-2	2500
809917	STA-3	4800

* Made of heat treated 4140 alloy steel.

Go to www.srtorque.com for head dimensions.

Go to www.srtorque.com for head dimensions.

STRAIGHT EXTENSION

Part Number	Model	Angle (degrees)	Max.Torque (in. lbs.)
819424	LTCE-4	0	300
819467	LTCE-6	0	800
819021	LTCE-14	0	4800
819768	LTCE-20	0	4800

15° ANGLE EXTENSION

Part Number	Model	Angle (degrees)	Max.Torque (in. lbs.)
819487	LTCE-4-15°	15	300
819504	LTCE-6-15°	15	800

STRAIGHT AND 15° ANGLE EXTENSIONS

ADAPTERS FOR DIN STYLE HEADS

- Can be used to convert most DIN style heads to a female dovetail for use on all S/R 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 Number	Model
819136	Adapter, 9mm x 12mm
819137	Adapter, 14mm x 18mm

ADAPTER FOR DIN STYLE HEADS

ADAPTERS FOR ROUND STYLE HEADS

- Can be used to convert most round style heads to a female dovetail for use on all S/R 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 Number	Model	Description
853021	BAJ	"J" size female-female dovetail
853022	BAY	"Y" size female-female dovetail

ADAPTER FOR ROUND STYLE HEADS

Exacta® 2

Digital Series

Exacta® 2 Series Features

- 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 assists the user in determining retained torque on a joint. The actual accuracy percentage is contingent upon joint condition and user technique.
- Programmable Limits and a Yellow/Green/Red illumination system guide you as you use the wrench. The display and a raised lens on the back of the wrench illuminate when each significant torque value is reached. An LED provides a Yellow/Orange light as you approach the minimum torque specification. The light turns Green when you reach the minimum torque, and remains green until you either stop pulling on the wrench or the maximum torque specification is attained. If you overtorque, it turns bright Red to let you know. Just pull to Green!
- 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 S/R dovetail and can be used with S/R Interchangeable Heads.
- The Exacta® 2 uses four (4) AA NiMH batteries of 2200 mAh capacity.
- Comes with free ISO/IEC 17025 calibration certificate.

Model	Lever Length	Overall Length	Weight
Exacta 2 - 25	12.5″ / 317mm	16.1″ / 409mm	2.8 .lbs. / 1.27 kg
Exacta 2 - 75	15.8″ / 401mm	19.4″ / 493mm	3.0 lbs. / 1.36 kg
Exacta 2 - 150	17.8′ / 452mm	21.5″ / 546mm	3.1 lbs. / 1.40 kg
Exacta 2 - 250	21.0″ / 533mm	25.2″ / 640mm	4.1 lbs / 1.86 kg
Exacta 2 - 400	36.5″ / 927.1mm	35.9″ / 911.8mm	7.7 lbs. / 3.49 kg
Exacta 2 - 600	55.1″ / 1399mm	59.7″ / 1516mm	13.0 lbs. / 5.90 kg

Part No.	Model	Description
10530*	Exacta 2 - 25	25 ft.lb, 33.8 Nm cap., 3/8″ SD Int Head inc.
10531*	Exacta 2 - 75	75 ft. lbs., 101.5 Nm cap., 3/8″ SD Int Head inc.
10532*	Exacta 2 - 150	150 ft. lbs., 203.3 Nm cap., 1/2″ SD Int Head inc.
10533*	Exacta 2 - 250	250 ft. lbs., 338.9 Nm cap., 1/2″ Ratchetching Sq. Dr.
10535*	Exacta 2 - 400	400 ft. lbs., 543 Nm cap., Dovetail**
10534*	Exacta 2 - 600	600 ft. lbs., 813.4 Nm cap., 3/4″ Ratchetching Sq. Dr.
21259	Charger & 4 AA NiMH 2200 mAh batteries & charger, NAFTA only	
21258	4 AA NiMH 2500 mAh NiMH batteries, spare	

* The Exacta®2 uses four (4) AA NiMH batteries of 2200 mAh capacity. These batteries (sold separately with 5-minute charger in NAFTA countries only) provide ample operating time between charges. Backup batteries (NAFTA countries only) are available with 2500 mAh capacity.
Please note: Use only NiMH 1.25 volt rechargeable batteries in your wrench. Using 1.5 volt alkaline disposable batteries will damage your wrench, create inaccurate readings, and VOID your warranty.

** Wrenches calibrated for use with heads having 3 7/8″ Common Centerline.

MD Series Features

- 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 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.
- Dial faces are color coded: silver for inch pounds, gold for foot pounds and white for Newton metres.
- Extension handle included on 600 ft.-lb/800Nm and greater capacity models for ergonomic advantage.
- Includes FREE NIST-traceable tabulated certification!

Dial

MD Series

Memory Dial Series — English

Part Number	Model	Torque Capacity	Steps of Graduation	Square Drive	Overall Length	Weight (lbs.)
850719	MD 50I	50 in. lbs.	1 in. lb.	¼ in.	10.3 in.	1.2
850701	MD 150I	150 in. lbs.	2 in. lbs.	⅜ in.	10.3 in.	1.2
850702	MD 300I	300 in. lbs.	5 in. lbs.	⅜ in.	10.3 in.	1.2
850703	MD 600I	600 in. lbs.	10 in. lbs.	⅜ in.	12.3 in.	1.4
850704	MD 150	150 ft. lbs.	2 ft. lbs.	½ in.	20.9 in.	2.8
850705	MD 250	250 ft. lbs.	5 ft. lbs.	½ in.	20.9 in.	2.8
850706	MD 600*	600 ft. lbs.	10 ft. lbs.	¾ in.	46.5 in.	7.5
850722	MD 1000*	1000 ft. lbs.	20 ft. lbs.	1 in.	71.5 in.	17.0

Memory Dial Series — Newton Metre

Part Number	Model	Torque Capacity	Steps of Graduation	Square Drive	Overall Length	Weight (lbs.)
850720	MD 6 Nm	6 Nm	.1 Nm	¼ in.	10.3 in.	1.2
850707	MD 15 Nm	15 Nm	.25 Nm	⅜ in.	10.3 in.	1.2
850708	MD 35 Nm	35 Nm	.5 Nm	⅜ in.	10.3 in.	1.2
850709	MD 70 Nm	70 Nm	1 Nm	⅜ in.	12.3 in.	1.4
850710	MD 200 Nm	200 Nm	2.5 Nm	½ in.	20.9 in.	2.8
850711	MD 350 Nm	350 Nm	5 Nm	½ in.	20.9 in.	2.8
850712	MD 800 Nm*	800 Nm	10 Nm	¾ in.	46.5 in.	7.5
850723	MD 1300 Nm*	1300 Nm	25 Nm	1 in.	71.5 in.	17.0

*Includes extension handle.

FREE Custom Storage Case Included

Flat Beam

M Series

Flat Beams Are Superior

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.

M Series Features

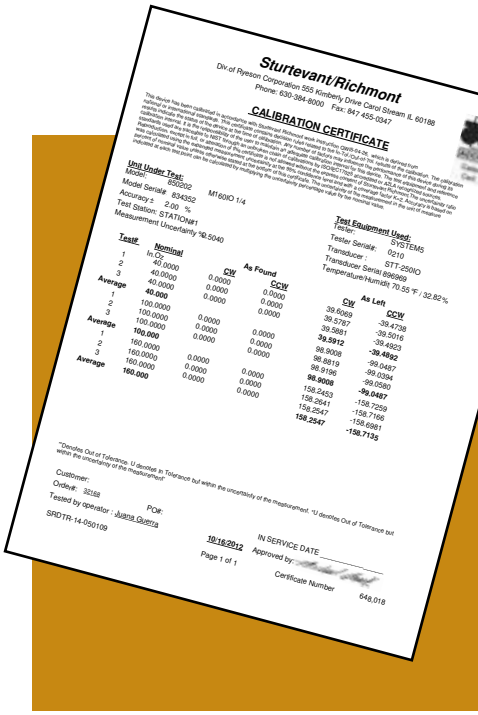
- Incredibly durable design - actual service life frequently measured in decades!
- Very low cost of ownership - exceptional accuracy retention permits extended calibration intervals, and they are virtually maintenance and repair free!
- Ideal for prevailing-torque and destructive testing applications.
- 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 and ISO 6789.
- Accuracy of all flat beams is +/- 2% of indicated value from 20% to 100% of capacity, in both directions.
- Includes FREE ISO/IEC 17025 tabulated certification!

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" Interchangeable Heads the adapter length will be 3".

Flat Beam Memory Series - English

Part Number	Model	Torque Capacity	Steps of Graduations	Square Drive	Lever Arm Distance	Weight (lbs.)
850233	M 32 IO	0-32 in. ozs.	2 in. ozs.	¼ in.	6.0 in.	0.2
850254	M 80 IO	0-80 in. ozs.	5 in. ozs.	¼ in.	6.2 in.	0.25
850202	M 160 IO	0-160 in. ozs.	10 in. ozs.	¼ in.	6.0 in.	0.25
850188	M 10 I	0-10 in. lbs.	½ in. lb.	¼ in.	6.0 in.	0.25
850222	M 25 I	0-25 in. lbs.	1 in. lb.	⅜ in.	6.3 in.	0.4
850242	M 50 I	0-50 in. lbs.	2 in. lbs.	⅜ in.	6.0 in.	0.4
850191	M 100 I	0-100 in. lbs.	5 in. lbs.	⅜ in.	6.5 in.	0.4
850211	M 200 I	0-200 in. lbs.	10 in. lbs.	⅜ in.	9.0 in.	0.5
850228	M 300 I	0-300 in. lbs.	10 in. lbs.	⅜ in.	13.5 in.	2.75
850246	M 600 I	0-600 in. lbs.	25 in. lbs.	⅜ in.	13.5 in.	2.75
850247	M 600 I	0-600 in. lbs.	25 in. lbs.	½ in.	13.5 in.	2.75
850195	M 1200 I	0-1200 in. lbs.	50 in. lbs.	½ in.	15.0 in.	2.75
850205	M 1800 I	0-1800 in. lbs.	50 in. lbs.	½ in.	18.0 in.	3.75
850220	M 25	0-25 ft. lbs.	1 ft. lb.	⅜ in.	13.5 in.	2.75
850240	M 50	0-50 ft. lbs.	2 ft. lbs.	⅜ in.	13.5 in.	2.75
850241	M 50	0-50 ft. lbs.	2 ft. lbs.	½ in.	13.5 in.	2.75
850190	M 100	0-100 ft. lbs.	5 ft. lbs.	½ in.	15.0 in.	2.75
850198	M 150	0-150 ft. lbs.	5 ft. lbs.	½ in.	18.0 in.	3.75
850227	M 300	0-300 ft. lbs.	10 ft. lbs.	¾ in.	30.0 in.	10.75



Flat Beam Memory Series - Newton Metre

Part Number	Model	Torque Capacity	Steps of Graduations	Square Drive	Lever Arm Distance	Weight (lbs.)
855276	M 110 cNm	0-110 cNm	5 cNm	¼ in.	6.0 in.	0.25
855280	M 1 Nm	0-1 Nm	.05 Nm	¼ in.	6.0 in.	0.25
855281	M 2.5 Nm	0-2.5 Nm	.1 Nm	⅜ in.	6.3 in.	0.34
855282	M 5 Nm	0-5 Nm	.2 Nm	⅜ in.	6.0 in.	0.34
855283	M 12 Nm	0-12 Nm	.5 Nm	⅜ in.	6.3 in.	0.38
855284	M 22 Nm	0-22 Nm	1 Nm	⅜ in.	9.0 in.	0.50
855285	M 34 Nm	0-34 Nm	1 Nm	⅜ in.	13.5 in.	2.75
855287	M 70 Nm	0-70 Nm	2 Nm	⅜ in.	13.5 in.	2.75
855288	M 70 Nm	0-70 Nm	2 Nm	½ in.	13.5 in.	2.75
855289	M 140 Nm	0-140 Nm	5 Nm	½ in.	15.0 in.	2.75
855290	M 210 Nm	0-210 Nm	10 Nm	½ in.	18.0 in.	3.75
855292	M 410 Nm	0-410 Nm	10 Nm	¾ in.	30.0 in.	10.75

● Pivoted Ball Handle

■ Pivoted Handle

Crowfoot Adapter

Part Number	Model	Description
850653	SRA-⅜	⅜ Female-Male Dovetail
850655	SRA-½	½ Female-Male Dovetail

ExacTorq®
Adjustable Series

Includes FREE certification from our ISO /IEC17025 Accredited calibration laboratory.

ExacTorq® Series Features

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 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.

Specifications	ExacTorq 100	ExacTorq 74
Part Number	810045	810046
Capacity	20-100 in. oz.	15-74 cNm
Graduation	1 in. oz.	1cNm
Length (less bit)	6.8 in.	6.8 in.
Weight	0.4 lbs	0.4 lbs
Drive Size	¼ in. Female Hex	¼ in. Female Hex

CAL 36/4 Screwdriver & Kits

- Accuracy of +/- 6% Indicated Value (from 20% to 100% of capacity) meets or exceeds ASME B107.300 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.
- Comes with FREE calibration certificate from our ISO/IEC 17025 Accredited laboratory! Can be ordered with certification for English or Metric units of measure. (Use P/N 810017 for Nm certification on Cal 36/4.)
- Uses standard bits, adapters, and sockets.

CAL 36/4
Adjustable Screwdriver & Kits

Specifications	CAL 36/4 Part No. 810587	CAL 40 Part No. 810477
Capacity	2-36 in. lbs./.2-4 Nm	3-40 kgf•cm.
Graduation	2 in. lbs./.2 Nm	2 kgf•cm
Length (less bit)	7.8 in.	7.8 in.
Grip Diameter	1.4 in.	1.4 in.
Weight	0.5 lbs.	0.5 lbs.
Drive Size	¼" Female Hex	¼" 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 7/64	Socket Adapter ¼	Torx T30
Hex ⅛	Bit Holder ¼	Torx T40
Hex 9/64	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 Number	Description
810587	CAL 36/4 Screwdriver
819953	¼" Hex to ¼" 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

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

Preset Screwdriver

PM Series

PM-15

PM Series Features

- Perfect for assembly of electronic components and precision mechanical products!
- Ideal for use in field maintenance kits - factory assembled quality in field reassembly!
- 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 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.
- Polished aluminum exterior.
- Minimum capacity of PM-series torque screwdrivers is 20% of maximum capacity.

Specifications	PM-5 Part No. 810007	PM-15 Part No. 810064	PM-36 Part No. 810563
Capacity	100 in. ozs. 70 cNm 7.2 kgf•cm	15 in. lbs. 1.65 Nm 17.2 kgf•cm	36 in. lbs. 4 Nm 40 kgf•cm
Length (less bit)	5.5 in.	6.3 in.	7.8 in.
Grip Diameter	0.8 in.	1.0 in.	1.4 in.
Weight	0.25 lbs.	0.3 lbs.	0.5 lbs.
Drive Size	1/4" Female Hex	1/4" Female Hex	1/4" Female Hex

PM-36

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.	Package Contents
816734	Multi-color (1 each)
816735	Blue (5)
816736	Yellow (5)
816737	Red (5)
816738	White (5)
816739	Green (5)

PM-5

Torque Multipliers

Torque Multipliers Features

Torque multipliers with S/R Flat Beam torque wrenches are perfect for the high torque/limited access applications frequently found in the construction, heavy equipment, and power generation industries! The Flat Beam torque wrench provides accurate torque measurement, which is then multiplied by the gears in the multiplier for torque achieved. This combination is extremely portable, thus well-suited to job site use.

Two styles are available, high- and low-ratio, offering the versatility of either design approach. For those with limited height applications, the low-ratio style offers a lower, longer profile. For those with restricted diameter applications, the taller, high-ratio style is offered.

- Capacities to 4000 ft.-lbs. or metric equivalent.
- Multipliers can be used with either English or Metric Flat Beam wrenches.
- Reaction bar or reaction foot 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.

Part Number	Model	Style	Max. Torque ft. lbs.	Input Drive Size	Output Drive Size	Gear Ratio	Overall Length	
850369	TM 1000	Low-ratio	1000	½″	¾″	4-1	26 in.	12 lbs.
850367	TM 2000	Low-ratio	2000	¾″	1″	4-1	26 in.	14 lbs.
850368	TM 4000	Low-ratio	4000	1″	1½″	4.33:1	30½ in.	35 lbs.
806300	XVK 15	Low-ratio*	1250	¾″	1″	4.5:1	17⅝ in.	7 lbs.

**Made in Germany*

When should you calibrate your torque tools?

Finally–an answer that works!

The Problem

That torque tools go out of calibration is no surprise to anyone who uses them. This has traditionally been addressed by periodic calibration, with tools sent for calibration internally or externally every "X" number of months or days.

This approach has guaranteed persistent and expensive shortcomings. If the calibration interval is too long, then the tool is used for assembling products after it has gone out of calibration, defeating the whole purpose of using a torque tool. If the calibration interval is too short, then $50 or more has just been wasted.

And that is just the beginning of problems with calendar-based calibration. Torque tools of different types, brands and models wear at different rates. Torque tools purchased at different times also differ in where they are in their life cycle. A tool with 300,000 cycles on it is likely to behave differently than the one with 10,000 cycles. Add varying usage rates (cycles per day) to the picture and the result is no calendar-based interval will provide cost-effective calibration for all of your tools.

Even with a calibration program in place, nonconformances and their related expenses still occur, yet money is wasted calibrating some tools too frequently.

The Solution

Technological and economic fact - electronics get more powerful and less expensive every year. This progression has led to the development of very inexpensive torque testers. And herein lies the seed of the solution.

Torque calibration laboratories use very high quality torque testers and usually specialized mechanical loaders and software. They require a controlled environment and technicians with a high level of knowledge about torque, calibration, and the interaction of the two. Expensive!

Fortunately there is now a middle ground. The last several years have seen the development of a class of torque testers with sufficient accuracy for torque "checks". A "check" is just that - a check on the accuracy of the torque tool. It is not a calibration. It does, however, allow one to catch any significant change in torque accuracy and in the environment in which the tool is used. Better still, it is very inexpensive in time and money to perform, and provides the warning needed when a tool is losing accuracy.

Torque checkers, such as our VeriTorq® for torque wrenches and Torq-Tronics® for power tools and torque wrenches, are inexpensive and designed to be deployed in the plant as lineside torque checkers. With just a little training and practice, your assembly personnel can check their torque tools as often as you see fit, be it the start of each week, each day, or even each shift.

With this approach, you are frequently checking the tools, sending them out for actual laboratory calibration only when it is genuinely needed. The nonconformances and waste are reduced – cost-effectively!

If you would like some assistance in seeing how this can work in your operation, give us a call! We will be glad to have one of our representatives help you find the best method for deploying this best practice in your operation!

General Information

Certification
All S/R 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 S/R 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.

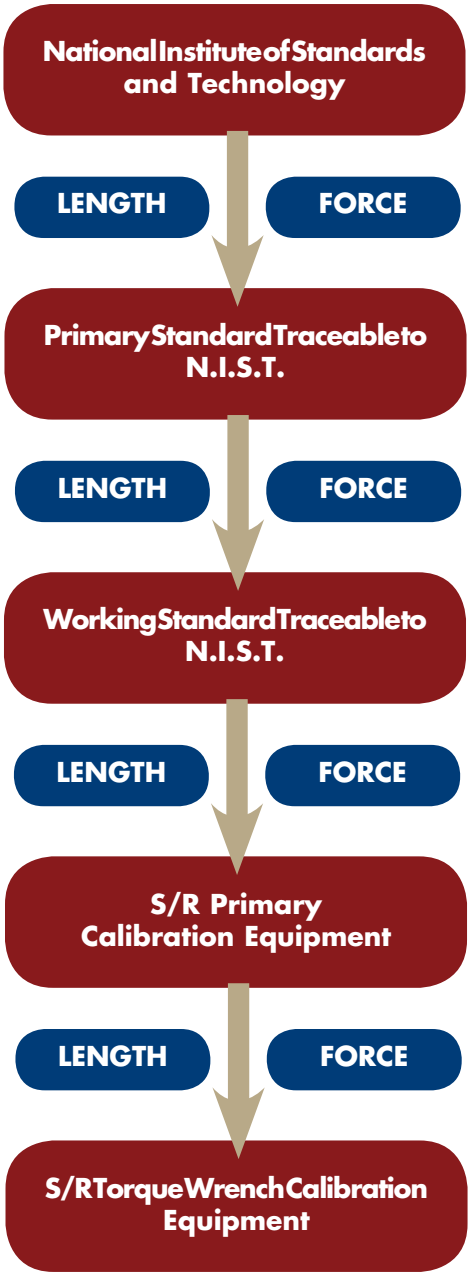
Organizations
S/R is a member of ISA the Industrial Supply Association and HTI the Hand Tool Institute.

ISA INDUSTRIAL SUPPLY ASSOCIATION Linking Channel Partners

VALUE ADDED PARTNER VAP INDUSTRIAL DISTRIBUTORS... A VITAL LINK IN THE SUPPLY CHAIN

HAND TOOLS INSTITUTE HTI CONSUMER · SAFETY · PROTECTION

Sturtevant Richmont Traceability System



SR Product Warranties

Warranty

Sturtevant Richmont Division of Ryeson Corporation warrants all products in this catalog against defective material and workmanship for the periods given in the table below. Upon inspection, Sturtevant Richmont 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 Richmont 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 wrench. Using 1.5 volt alkaline disposable batteries will damage your wrench or create inaccurate readings, damage your wrench and VOID your warranty.

Product Family	Warranty Duration
Torque Transducers	1 year from date of purchase
Torque Testers	1 year from date of purchase
Mechanical Loading Systems	5 years from date of purchase
Calibration Arms	5 years from date of purchase
Load Platforms, Weights	5 years from date of purchase
Software	90 days from date of purchase
All other products	1 year from date of purchase

Liability

Sturtevant Richmont 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 Richmont 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 S/R 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 S/R products.

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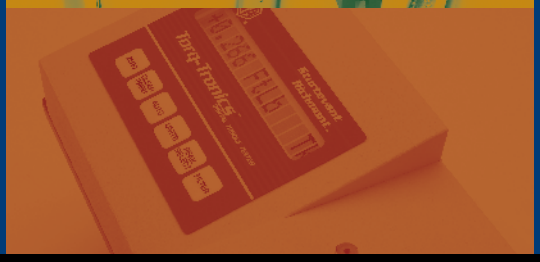
Torque Conversion Formulas

Known	Multiplier	Result
inch grams	.249085	milli Newton metres
	.0249085	centi Newton metres
	.00249085	deci Newton metres
inch ounces	28.349527	inch grams
	72.007	gram centimeter
	.706156	centi Newton metres
	.0706156	deci Newton metres
inch pounds	453.59243	inch grams
	16	inch ounces
	1.1521193	kilogram centimeters
	.011521193	kilogram meters
	11.2985	centi Newton metres
	1.12985	deci Newton metres
	.112985	Newton metres
foot pounds	12	inch pounds
	.1382541	kilogram meter
	1.355818	Newton metres
kilogram meters	9.80665	Newton metres
	7.233058	foot pounds
Newton metres	.101971	kilogram meters
	8.850744	inch pounds
	.737562	foot pounds
deci Newton metres	14.161184	inch ounces
	.885074	inch pounds
centi Newton metres	1.4161184	inch ounces
	.0885074	inch pounds
kilogram centimeters	.86796	inch pounds
	.0980665	Newton metres

Torque Application Tool Selection Chart

The chart below will assist you in selecting the torque tools that will fit the requirements of your torque needs.

	Assembly	Maintenance	Audits	Destruct Testing
Exacta® Digital Wrenches	■	■	■	
M Series Flat Beam Wrenches	■	■	■	■
MD Series Dial Wrenches			■	
SDR, SD, CCM Micrometer Adjustable Wrenches	■	■		
LTC, LTCR, LTCS Series Preset Wrenches	■			
Cal, Exactorq Series Adjustable Screwdrivers	■	■		
PM Series Preset Screwdrivers	■			



Please Note Our Catalog Format Has Changed!

To provide you with more current information we have created separate catalogs for Wireless Torque Tools, Verification and Calibration Equipment and our Basic Tools Catalog. (You are currently viewing our Basic Tools Catalog.)

The Wireless Torque Tools Catalog will be released in Summer 2013 and the Verification and Calibration Catalog will be released in Fall 2013.

www.srtorque.com

Sturtevant Richmont

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Come visit our YouTube Channel. It is called the Newton Metre Channel and it hosts our product, training, and educational videos.

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