

## Product Catalog

TORQUE TOOL SALES & RENTALS, PIPE & FLANGE MACHINING TOOLS,
MOBILE REPAIR & CALIBRATION









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## **About Us**

Privately Owned and Held Quality Torque & Tensioning Equipment Since 1987

Full Selection of Torquing Equipment Pumps & Accessories In- House and On- Site Repair & Calibration

Millennium Torque & Tensioning, Inc. is a privately-owned manufacturer of pneumatic and electric driven gear multipliers.

Since 1987, MTT has supplied numerous industries with quality torque and tensioning equipment. Our tooling has been used in virtually every industry. Along with a full selection of torqueing equipment, pumps, and accessory items, MTT also provides its customers with repair & calibration of all major brands of hydraulic, pneumatic, electric, and hand torque tools (both inhouse and on-site).

Our MTT dual-speed and single-speed torque wrenches are field proven and engineered for maximum reliability and dependability because we know what it takes.

### Locations

Canonsburg, PA
Toledo, OH
Griffith, IN
Spartanburg, SC
Lakeland, FL



Torque & Tensioning Inc.

## Valve Operating Tools

#### **Gate Valve**

Basic Set Includes: MTT- DA2motion 10 (max. torque 730 lb-ft), (Digital) revolution counter including adapter, extendable reaction arm with impact protection, (2) 18 volt lithium batteries with charger, transport and storage box, and user manual including Md-selection chart.

#### Accessories A for Basic Set: Handwheel Adaptors (for valves with handwheel operation)

Each of both handwheel adapters (max. torque 730 lb-ft) is equipped with 5 pcs drive pawls for adjusting the handwheel adaptor to number of handwheel spokes – possible combinations 2/3/4/5 are engraved on the handwheel.

>Handwheel "small" MTT-78857

>Handwheel "large" MTT-78858

(Pitch circle  $\varnothing$  for drive pawl 165 mm) (Pitch circle  $\varnothing$  for drive pawl 245 mm)











Accessories B for Basic Set: Waterworks Underground Valve Extension includes 6 pieces of coupling sleeves for underground valves, complete MTT-79598

We offer accessories to allow the extension of the valve tool to operate underground valves (pictured right). The set includes extension pieces as well as coupling-sleeve adapter (MTT-78867) and 6 pieces of coupling sleeves for underground valves. We also offer a fire hydrant adapter for the opening and closing of fire hydrants.





### **Rising Stem Valve**

Basic Set Includes: Stem Valve offset gear with 1:1.5 input/output ratio and 10" diameter handwheel adapter (Offset gear available with: MTT-DA2motion 10)





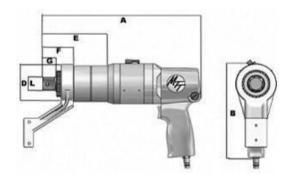


## Torque & Tensioning Inc.

## MTT 2- Speed Pneumatic Torque Gun

Made in the USA, this multi-sleeve, pneumatic operated continuous rotation nutrunner will loosen or tighten threaded fasteners with a system accuracy of +/-3% and repeatability of +/-2%. The Millennium Tru-Torc® (MTT) will produce from 60-5000 ft. lbs. of torque while the operator only feels 12 to 18 inch lbs. on the free swing pistol grip.





Custom reaction arms available upon request

SYSTEM	TORQUE (ft lbs.)	IDLING RPM	WEIGHT (lbs.)
MTT-7	60-670	60	11
MTT-13	100-1300	25	14
MTT-30	250-2500	10	18
MTT-40	350-3700	8	19
MTT-50	500-5000	6	29

SYSTEM	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	L (in)
MTT-7	12.1	7.5	3.23	2.92	4.93	2.25	0.95	3/4"
MTT-13	12.57	7.5	3.23	3.66	5.52	2.4	1.06	1"
MTT-30	14.16	7.5	3.23	3.56	5.91	2.88	1.06	1"
MTT-40	15.84	7.5	3.23	3.9	6.38	3.39	1.58	1-1/2"
MTT-50	17.1	7.5	3.23	4.73	8.59	3.86	1.65	1-1/2"



## Torque & Tensioning Inc.

## SS Single-Speed Pneumatic Torque Gun

The Single Speed Torque Wrench was designed to access smaller, tighter space envelopes than any other pneumatic nut runner available. The tight radius and shorter length of this tool will allow users to torque and disassemble more threaded fasteners than current models.





SYSTEM	TORQUE (ft lbs.)	DRIVE	LENGTH (in)	WEIGHT (lbs)
SS-7	60 - 670	3/4"	11"	10 lbs.
SS-13	100 – 1,300	1"	11-1/2"	10.5 lbs.
SS-30	250 – 2,500	1"	15"	17.5 lbs.
SS-40	400 – 4,000	1-1/2"	15-1/12"	18 lbs.
SS-50	500 – 5,000	1-1/2"	17-5/16"	35 lbs.

#### **Features & Benefits**

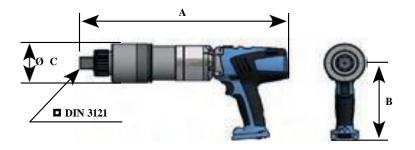
- Superior Gear Design
- High Torsional Strength
- Faster Operating Capability
- Lower CFM Requirement (24 Max)
- User Friendly Pistol Grip with 360 Rotation
- Multiple Reaction Arm Capabilities
- Small Nose Radius



# Torque & Tensioning Inc.

## **Battery Operated Torque Gun**

With our new MTA2 battery tool, a decisive step forward has been achieved with the newest gearbox technology which enables simpler handling and reduced weight and size. Mobile, cordless bolting is now safer due to the additional automatic locking of the motor and gearbox.



#### Features & Benefits

- Optimized handling
- More light and compact
- Automatic locking of gearbox and motor
- Integrated free turning of motor
- Active two steps battery charge indicator
- Six sizes up to a maximum of 5,900 ft/
- Includes protective carrying case, battery charger, and one spare battery



Model	A (in)	B (in)	C (in)
MT A2-05	14.37	9.65	2.7
MT A2-10	14.37	9.65	2.7
MT A2-20	15.94	9.65	3.15
MT A2-30	15.94	9.65	3.15
MT A2-36	15.94	9.65	3.15
MT A2-48	17.2	9.65	3.39

Model	Torque Range (lb-ft)	RPM Gear 1	RPM Gear 2	RPM Gear 3	RPM Gear 4	Drive Size	Weight (lb)	# of Tightenings / Single Battery
MT A2-05	95-405	8.4	16.6	37	71.6	3/4"	11.79	680
MT A2-10	130-735	5.3	10.8	24.5	48	3/4"	11.79	350
MT A2-20	160-1475	3	5.6	12.7	24.6	1"	15.1	200
MT A2-30	240-2200	2.3	4.6	10.3	20.9	1"	15.1	100
MT A2-36	280-2655	1.8	3.3	7.8	15.3	1"	15.1	95
MT A2-48	370-3500	1.4	2.9	6.4	12.9	1 1/2"	18.73	80





## MILLENNIUM™ Torque & Tensioning Inc.

### **Hand Clickers**

The Hand Clickers have an accuracy of +/-3% of reading. They include a traceable calibration certificate. The extension handle can be used to reduce operator stress and injury. A positive 'click' can be seen and heard.



Tool Model	Minimum Torque (lb-ft)	Maximum Torque (lb-ft)	Square Drive
HH150	30	150	1/2"
HH250	45	220	1/2"
HH500	100	480	3/4"
HH600-075	150	600	3/4"
HH600-100	150	600	1"
HH750-075	220	750	3/4"
HH750-100	220	750	1"
HH1100-075	370	1,100	3/4"
HH1100-100	370	1,100	1"



## Low Clearance Hydraulic Torque Wrench TWLC

The TW Series Wrench was designed for the most inaccessible bolting areas found in the industry. Its long neck, short height, and small radius have all contributed to its great success.



Smallest nose radius on the market; minimal height and width dimensions

#### **Features & Benefits**

- Low Width-High Strength Design
- Superior Torsional Strength
- Fast Operation Cycle
- Rigid Steel Body Construction
- Internal Swivel Manifold Relief
- Built-in Reaction Pad
- Small Nose Radius
- Tool Free Link Change
- Corrosion Resistant Finish
- Multi-Axis High Flow Swivel Manifold

Hex Range		Range	Minimum Torque	Maximum Torque	
Drive Body	Minimum (in)	Maximum (in)	(lb-ft)	(lb-ft)	
TWLC2	1-1/8"	2-3/8"	189	1575	
TWLC4	1-5/16"	3-1/8"	477	3975	
TWLC8	1-7/8"	3-15/16"	954	7950	
TWLC15	2-7/16"	4-5/8"	1,782	14850	
TWLC30	3-1/8"	6-1/16"	3,456	28800	



## Torque & Tensioning Inc.

## SlimLine Hydraulic Torque Wrench TWSL

The SlimLine Torque Wrench is engineered to fit inaccessible applications with minimal clearance. The Drive Body is designed to interchange with the TWLC (Low Clearance) and the new TWSL (SlimLine) Links, lowering your tool investment across each series to broaden your application reach.



Smallest nose radius on the market; minimal height and width dimensions

#### **Features & Benefits**

- Dynamic engineer modeling (FEA) optimized tool design to extend life and durability
- The SlimLine links use the same quick-change Drive Body as the existing TWLC links
- Small nose radius fits all standard API and ANSI flanges
- Rigid steel body construction with corrosion resistant plating
- Fully enclosed drive mechanism for operator safety
- Swivel manifold has an internal relief valve to prevent retract side over pressurization
- Multi-Swivel technology for free positioning of tool and hoses
- Perfect for wellhead apllicators

Nut	A/F	Link Order	Maximum Torque	Weight (Link Only)	
(in.)	(mm)	Number	(lb-ft)	(lbs)	
1-13/16"	46	TWSL4-046	2,639	8	
2"	50	TWSL4-050	3,271	8.2	
2-3/16"	55	TWSL4-055	3,568	8.2	
2-3/8"	60	TWSL4-060	3,867	8.3	
2-9/16"	65	TWSL4-065	4,210	8.4	
2-3/4"	70	TWSL4-070	4,210	8.4	
2-15/16"	75	TWSL4-075	4,210	8.4	
3-1/8"	80	TWSL4-080	4,210	8.4	



## High Cycle Square Drive Hydraulic Wrench TWHC

The TWHC is a lightweight, high-strength tool that features superior torsional strength, fast operation cycle, fine tooth pawl, and a floating piston design.



Tool Model	Torque Min. (lb-ft)	Torque Max. (lb-ft)	Square Drive	Weight (lbs)
TWHC1	170	1,413	3/4"	6.2
TWHC3	376	3,136	1"	11.7
TWHC6	726	6,050	1-1/2"	19.4
TWSD11	1,313	10,940	1-1/2"	28.9
TWSD25	2,940	24,500	2-1/2"	65
TWHC50	6,360	53,000	2-1/2"	152

#### **Quality Means Lower Cost of Ownership**

- Designed for high cycle life: 2 to 3x more than existing technology
- Increased reliability: simple drive assembly means less downtime
- Corrosion resistant material adequate for harsh environments

#### **Enhanced Usability**

- Compact nose radius allows the tool to fit in tighter, hard-to-reach spaces
- Low weight, high strength design
- Fast operation, long stroke and optimum flow
- Multi-direction high flow swivel manifold
- Push button square drive reversal and reaction arm positioning
- Push-button release of square drive & reaction arm for all models except TWHC50

#### **Designed with Safety in Mind**

- Fully enclosed drive mechanism for operator safety
- Swivel manifold internal relief valve prevents retract side over pressurization
- Fine tooth pawl prevents tool "lock -on"



## Torque & Tensioning Inc.

### Millennium Square Drive MSD

Millennium manufactures simpler, faster, and more efficient and reliable Hydraulic Torque Wrenches that are user friendly. The high strength alloy steel and controlled vacuum heat treatment ensures stronger drive components. Improved high pressure seal design is suitable for static & dynamic applications.



- Fine Ratchet and Pawl for better engagement
- Multi tooth drive segment ensures up to 32° rotation per stroke
- Balanced drive Rod-Side load & free piston movement
- Laser engraved torque chart (Nm & Ft lbs)
- Hard chrome plating of piston rod which ensures better wear resistance of rod seal
- Self lubricating low Nickel Bronze drive bush to protect body from wear
- 360 x 180 Degree swivel for better degree of movement Leak proof quick connect couplers for easy and safe operation
- End-cap design for sufficient back pressure for smooth piston forward force
- Rigid reaction suitable for heavy load application
- Simple design reaction arm release button for ease of operations
- Cold worked cylinder bore for longer life and super finish for long working conditions

	MINIMUM TORQUE	MAXIMUM TORQUE	SQUARE	WEIGHT
TOOL MODEL	(lb-ft)	(lb-ft)	DRIVE	(lbs)
MSD7	80	830	3/4"	3.9
MSD-1	131	1,312	3/4"	5.5
MSD-3	310	3,098	1"	10.8
MSD-5	535	5,347	1-1/2"	20.9
MSD-8	775	7,965	1-1/2"	23.7
MSD- 10	1,131	11,307	1-1/2"	32.4
MSD- 20	1,917	19,675	2-1/2"	57.2
MSD- 25	1,551	25,630	2-1/2"	74.8
MSD- 35	3,611	36,113	2-1/2"	110
MSD- 50	5,107	51,073	2-1/2"	143



Torque & Tensioning Inc.

## **Battery Operated Torque Pump**

The PLARAD® XA1power is a game-changing, lightweight (22 lbs) battery power pack for industrial bolting, revolutionizing hydraulic tool operations. It simplifies the process by requiring only a torque wrench, hoses, and the compact power pack, making it ideal for international teams with no dependency on power supply frequency or voltage. Capable of handling up to 150,000 Nm of torque and operating hydraulic wrenches up to 800 bar, it delivers an average of 170 bolting connections per charge—all while being significantly lighter than conventional 66-88 lbs units.



- Battery operated power unit with exchangeable battery (FEIN system)
- Safe and fully automatic
- Operates at the touch of a button up to the preset torque or pressure
- Compact & robust design
- Maximum freedom of movement through wireless remote control
- Perfect for service applications thanks to compact dimensions and low weight







## **Electric Hydraulic Pump PE55TWP**

The PE55TWP-BS has been the market leading electric pump for over 30 years and is therefore tried and tested. A simple, lightweight design with a recent upgrade that has created a cost-effective workhorse.



#### **Quality means Lower Life-Cycle Costs**

- Over 100,000 cycles
- Continuous duty up to 120°F (50°C) ambient
- Proven design= proven reliability

#### **Enhanced Usability**

- Two speed high performance pump
- Retract side internal relief valve protects tool
- · Hand remote
- 4' calibration capable gauge
- Use with single or double acting tools
- Four-tool manifold (- 4 models only) allow use of up to four tools simultaneously

## Pneumatic Hydraulic Pump RWP55

The RWP55-BS has been the market leading pump for over 30 years and is therefore tried and tested. A simple, lightweight design with a recent upgrade that has created a cost-effective workhorse.

### **Quality means Lower Life-Cycle Costs**

- Over 100,000 cycles
- Continuous duty up to 122°F (50°C) ambient
- Proven design= proven reliability

### **Enhanced Usability**

- Powerful 3 hp motor
- Retract side internal relief valve protects tool
- Use with single or double acting tools (not for lifting applications)
- 4' calibration capable gauge
- Four-tool manifold (- 4 models only) allow use of up to four tools simultaneously





# Torque & Tensioning Inc.

## **CAT Engine Tool Sets**

Hydraulic tensioning tool sets designed for CAT 3600 engines ensure fast and precise tightening of critical bolts on cylinder heads, connecting rods, and main bearings. Each set comes complete with certificates, an operating manual, and a storage box for convenience.



#### **CAT Model 3600 Cylinder Head**

- Powerful spring return with overstroke protection
- Top-mounted ports for easy hose access
- Bridge and puller extensions minimize engine disassembly

#### **CAT Model 3600 Connecting Rod**

- Powerful spring return with overstroke protection
- Spring-loaded nut rotation socket for secure engagement
- Fast wind down with \%" square drive and 15mm hex

### **CAT Model 3600 Main Bearing**

- Powerful spring return with inverted swivel handle for better handling
- Mounting point for CAT-3600 lifting
- Swivel skirt for easy tool alignment

#### **Main Bearing Accessory Group**

- Corrosion-resistant coating with quick-release pins
- Leashed pins and arms to reduce drop risk
- Compatible with Boltight and OEM main bearing tools





### Torque & Tensioning Inc.

## **Spring Return Hydraulic Stud Tensioner SRT**

The SRT (Spring Return Tensioners) are the quickest and most efficient tools available in today's market. They include a spring return load cell to expedite ram retraction. They are lighter in weight and offer a host of safety and fail-safe features such as safety relief valve to eliminate over stroking the ram and having to change the seal.

TOOL REF -	Stud Diameter				Tool Load		Hydraulic Area		Approx. Wt.					
Load Cell Order No.	Metric	Adapter Kit Order No.	Imperial	Adapter Kit Order No.	kN	Lbf	mm²	in²	kg	lb				
(SRT 0)	M20	SRTAS000006	3/4"	SRTAS000002										
SRTAS000001	M22	SRTAS000008	7/8"	SRTAS000004	160 35,971	1,067	1,654	1.4	3.1					
(SRT 1)	M24	SRTAS010007	1"	SRTAS010003										
SRTAS010001	M27	SRTAS010009	-	-	280	62,950	1,867	2,894	2.7	6				
	-	-	1-1/8"	SRTAS010005		1000								
	M24	SRTAS020011	1"	SRTAS020003										
	M27	SRTAS020013	-	_										
(SRT 2) SRTAS020001	M30	SRTAS020014	1-1/8"	SRTAS020005	450	101,169	3,001	4,652	4.1	9				
3K1A3020001	M33	SRTAS020015	1-1/4"	SRTAS020007										
	M36	SRTAS020016	1-3/8"	SRTAS020009										
	M33	SRTAS030011	1-1/4"	SRTAS030003										
(CDT 2)	M36	SRTAS030012	1-3/8"	SRTAS030005										
(SRT 3) SRTAS030001	M39	SRTAS030013	1-1/2"	SRTAS030007	660	148,381	148,381	148,381	4,401	6,822	5.4	11.9		
	M42	SRTAS030014	1-5/8"	SRTAS030009										
	M39	SRTAS040014	1-1/2"	SRTAS040004										
	M42	SRTAS040015	1-5/8"	SRTAS040006						18.5				
(SRT 4) SRTAS040001	M45	SRTAS040016	1-3/4"	SRTAS040008	1,000	224,820	6,668	10,335	8.4					
3111/130 10001	M48	SRTAS040017	1-7/8"	SRTAS040010										
	_	-	2"	SRTAS040012										
	M52	SRTAS050012	2"	SRTAS050004				$\overline{}$						
	M56	SRTAS050013	2-1/4"	SRTAS050006		1,500 337,230 10								
	M60	SRTAS050015	-	-					13.8	30.4				
(SRT 5)	M64	SRTAS050016	2-1/2"	SRTAS050008	1,500		10,003	10,003 15,504						
SRTAS050001	M68	SRTAS050018	-	-										
	M70	SRTAS050020	-	-										
	-	-	2-3/4"	SRTAS050010										
	M72	SRTAS060014	2-3/4"	SRTAS060004										
	M76	SRTAS060016	3"	SRTAS060006										
(SRT 6)	M80	SRTAS060018	-	-	2,500	562,050	16,671	25.84	23	50.7				
SRTAS060001	M85	SRTAS060020	3-1/4"	SRTAS060008										
	M90	SRTAS060022	3-1/2"	SRTAS060010										
	M90	SRTAS070010	3-1/2"	SRTAS070004										
(SRT 7)	M95	SRTAS070012	-	-	2 200	710 424	21 220	22.076	22	70.5				
SRTAS070001	M100	SRTAS070014	3-3/4"	SRTAS070006	3,200	719,424	21,339	33.076	32					
	-	-	4"	SRTAS070008										
	M105	SRTAS080010	4"	SRTAS080004				340 42.377		99.2				
(SRT 8) *	M110	SRTAS080012	-	-	4,100	4,100 921,762	1,762 27,340		45					
SRTAS080001	M115	SRTAS080014	4-1/4"	SRTAS080006										
	_	-	4-1/2"	SRTAS080008										

- Automatic powered piston retract mechanism
- Unique quick release bridge adaption
- Encapsulated nut rotator disk
- · Lightweight compact load cell
- · Duel inlets eliminate hose tee pieces
- Piston over-stroke prevention with safety relief valve
- Piston/cylinder misalignment compensation





Torque & Tensioning Inc.

## **Power Team Hydraulic Equipment**

Power Team specializes in high-pressure hydraulic technology. Through a broad range of leading-edge component parts, accessories and tools, Power Team enables the creation and upkeep of concentrated force delivery solutions that can meet any application criteria. Thanks to rugged design plus advanced protective coatings, Power Team equipment is able to cope with deployment in the most uncompromising of applications. It thereby delivers ongoing functional reliability under a range of stresses to an extent.

## Capabilities High Force Tools & Bolting Equipment:

- · Manufacturing facilities
- Heavy lifting & positioning solutions
- Custom product requests
- Hydraulic training programs





**RLS Series Cylinder** 



**Hydraulic Jacks** 



## MILLENNIUM' Torque & Tensioning Inc.

## **Nord-Lock Group Equipment**

We are a proud master distributor of Nord-Lock Group Equipment. The Nord-Lock Group developed the original Nord-Lock wedge-locking washer that safely secures bolted joints. Since then, their innovative bolting technologies and expertise has grown to be the most comprehensive on the market, incorporating Superbolt ™ mechanical tensioners, Boltight ™ hydraulic tensioners and Expander System ® pivot pins.



**Superbolt Flexnut** 



**Superbolt Load Sensing Flexnut** 



**Superbolt EZFit Mechanical Expansion Bolts** 



Superbolt Mechanical Tensioner



**Boltight Hydraulic Nut** 



**Nord-Lock Wedge Locking Washers** 



**Expander Pin** 



## Torque & Tensioning Inc.

## **Nut Splitter**

The ENS nut splitter offers a reliable and effective solution to the removal of seized and eroded nuts. Order a cylinder and a head to make a complete nut splitter. Cylinders are interchangeable with heads in specific size ranges, and each are sold separately.

- · Triple edge replaceable cutting blade
- Blade positioning scale to eliminate bolt damage
- Cutting depth adjusted by rotating the cylinder
- Size range from ¾" to 3½" bolt diameter
- Designed to fit BS 1560/ANSI 16.5 flanges
- · Special subsea versions available
- Versatile, reliable, and trouble-free operations
- Operates off a standard 10,000 psi pump unit



Tool Reference - Order No.	Range														
STANDARD Standard Cylinder Single Acting	Head	Bolt Diameter Nut A			/F App		ox. Wt.			1-3/4"	M45	2-3/4"	70		
		Decore -				kg	lb		ENSAS030002	1-7/8"	M48	2-15/16"	75	42	92.6
		(in.)	metric	(in.)	(mm.)					2"	M52	3-1/8"	80		
ENSAS010001	ENSAS010002	3/4"	M20	1-1/4"	30	6.7	14.8	ENSAS030001	ENSAS030003	1-3/4"	M45	2-3/4"	70	42.5	93.7
		7/8"	M22	1-7/16"	32					1-7/8"	M48	2-15/16"	75		
		1"	M24	1-3/8"	36					2"	M52	3-1/8"	80		
		_	M27	-	41					2-1/4"	M56 M45	3-1/2" 2-3/4"	85 70		
	ENSAS010003	3/4"	M20	1-1/4"	30	6.9	15.2			1-7/8"	M48	2-3/4	75		
										2"	M52	3-1/8"	80		
		7/8"	M22	1-7/16"	32					2-1/4"	M56	3-1/2"	85		
		1"	M24	1-3/8"	36					2-1/2"	M60	3-7/8"	90		
		1-1/8"	M27	1-13/16"	41					-	M64	-	95		
		1-1/4"	M30	2"	46				ENSAS030005	1-3/4"	M45	2-3/4"	70	44	97.0
		-	M33	-	50					1-7/8"	M48	2-15/16"	75		
ENSAS020001	ENSAS020002	1-1/8"	M30	1-13/16"	46	15.8	34.8			2"	M52	3-1/8"	80		
		1-1/4"	M33	2"	50					2-1/4"	M56	3-1/2"	85		
		1-3/8"	M36	2-3/16"	55					2-1/2"	M60 M64	3-7/8" 4-1/4"	90		
		1-1/2"	M39	2-3/8"	60					2-3/4	M68	4-1/4	100		
		1-1/8"	M30	1-13/16"	46					_	M72	-	105		
	ENSAS020003		M33	2"	50	16	35.3	ENSAS040001	ENSAS040002	2-3/4"	M76	4-1/4"	110	73	160.9
		1-1/4"		-						3"	M80	4-5/8"	115		
		1-3/8"	M36	2-3/16"	55				ENSAS040003	2-3/4"	M76	4-1/4"	110	7.5	165.3
		1-1/2"	M39	2-3/8"	60					3"	M80	4-5/8"	115		
		1-5/8"	M42	2-9/16"	65					3-1/4"	M85	5"	120	75	
		1-3/4"	M45	2-3/4"	70					3-1/2"	M90	5-3/8"	130		



# Torque & Tensioning Inc.

## **Hydraulic Flange Spreaders**

The Hydraulic Flange Spreaders FLS15 require a minimum access gap of 0.025". However, the spreading force has been increased to 15 tons on the first step and 20 tons on the remaining steps. Used on pipe flange work from construction to maintenance and turnarounds.







- 33,000 pound (15 metric ton) spreader features an incorporated wedge design that provides structural support to the shoes throughout the tool range to maximize tool longevity and performance.
- Jaws fully supported by wedge for excellent durability
- Ideal for flanges with narrow gaps o nly 5 mm (.2 inches) required for entry
- Compact and lightweight design only 287 mm (11.28 inches) long at a weight of 3.2 kg (7 pounds)
- Suitable for the offshore environment due to superior corrosion resistance
- Quick adjustments for various tasks due to interchangeable shoes (both stepped and serrated)
- Includes female half coupler mates to standard 3/8" male half coupler





## Flange Alignment Pins



#### **Features and Benefits**

- Safe, fast, and effective
- The pin's tapered shaft is a patented feature which eliminates the need for hammering and prying when lining up flange bolt holes
- Sold individually and in sets within a custom-made, foam-lined kit
- Sizes range from ¾" to 3¾" hole diameter

## **Lokrite™ Backup Wrenches**

- Great for areas that require non-sparking torque applications
- Units hold themselves in place
   Hands are not needed to hold
   backup in place, and a
   hammer is not needed to remove
   the wrench
- Available in hex sizes 1<sup>1</sup>/<sub>16</sub>" to 6½"





## **Impact Sockets & Accessories**

### **Sockets**







#### **Features and Benefits**

- 1/2" to 2-1/2" Square Drive
- Fractional and Metric
- 6-Point and 12-Point
- #4 and #5 Spline Drive

### **Hex Stock**



#### **Features and Benefits**

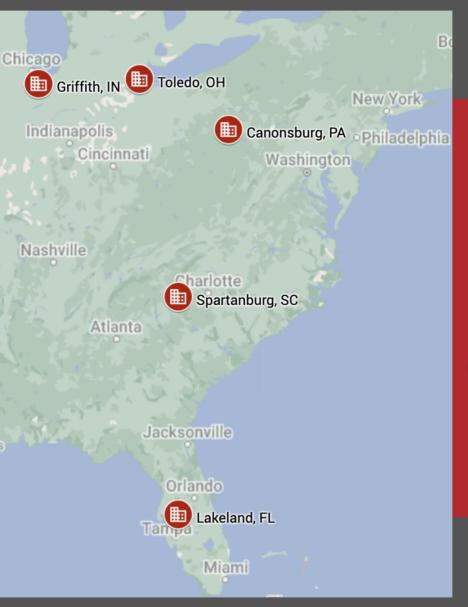
- Flat Striking Wrenches
- Offset Striking Wrenches
- Fractional and Metric
- 6-Point and 12-Point

## **Striking Wrenches**



- Flat Striking Wrenches
- Offset Striking Wrenches
- Fractional and Metric

# Locations



Canonsburg, PA
Toledo, OH
Griffith, IN
Spartanburg, SC
Lakeland, FL

