

# GETTING THE BEST OUT OF A TORQUE WRENCH

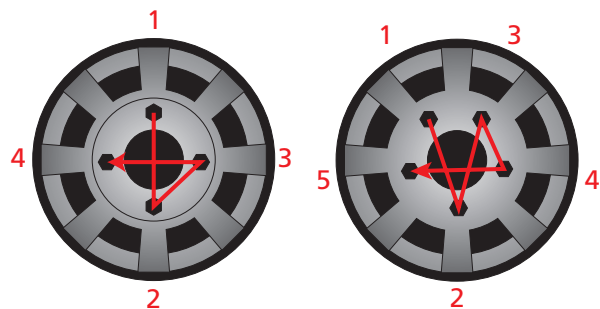
## Information & Advice

As a precision instrument, the **STANLEY®** Torque wrench range is designed along best practice principles. To preserve the set calibration, the tool should be reset to 10% of the maximum capable load after each use. In order to provide a secure fastening without the risk of distortion, it is important to follow correct tightening sequences.

**IMPORTANT:** Torque specifications vary widely, always refer to the manufacturer's recommendation. The star pattern sequence should be used until all of the fasteners are tightened to the specified torque.

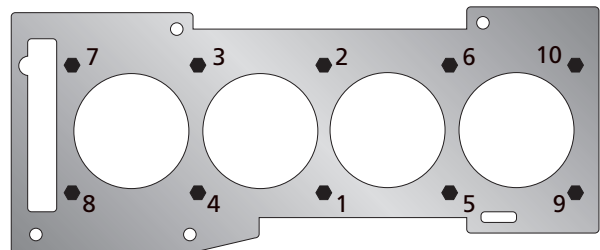
### RADIAL APPLICATIONS

For wheels and other radial applications, it is important to tighten the fasteners following the traditional star pattern sequence shown in the diagram on the right.



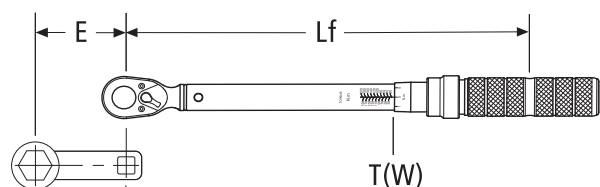
### CYLINDER HEAD APPLICATIONS

Always start in the middle of the engine, between cylinders 2 and 3 for a 4 cylinder engine. Move outwards in a spiral or crosswise outward direction along both sides. Tighten gradually, increasing the torque in stages on each fastener to ensure an even clamping force, until the outer bolts on Cylinders 1 and 4 have been tightened



### FORMULA FOR CALCULATING THE EFFECT OF TORQUE WRENCH EXTENSIONS

In cases whereby special attachments change the calibration of the torque wrench or when it is impractical to use regular sockets (such as whilst tightening threaded connectors), it is necessary to calculate the accurate settings using the formulas shown in the diagram opposite:

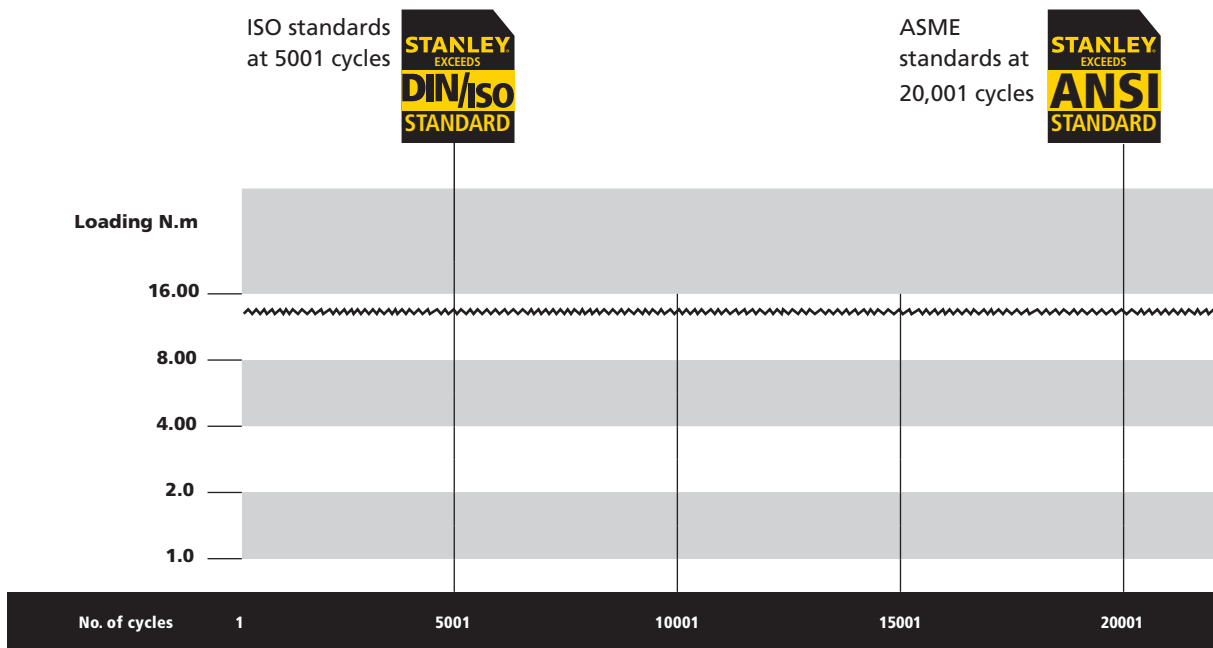


- E — Effective length of extension
- Lf — Lever length of the wrench: middle of handle to center of square drive
- T(W) — Torque setting on the wrench
- T(A) — Torque applied by the extension to the fastener
- T(A) —  $T(W) \times \frac{L_f + E}{L_f}$

# CONSISTENT PERFORMANCE, +/- 4% ACCURACY EVEN AFTER 20,000 CYCLES

Robust build quality and precision manufacturing ensures STANLEY® Torque wrenches meet and beat current standards, delivering reliability, day after day - year after year.

## Reliability Of Mechanism



Test carried out using 1/4" drive, 5 - 25N.m 50% loading

## Torque Wrench Comparator

SKU #	Description	Drive Size	Torque Range	Increments N-m	Width mm	Length mm	Weight kg
STMT73587-8	1/4" TORQUE WRENCH 5-25 Nm	1/4"	5 - 25N-m 39.8-225.7 in-lb	0.1 N-m	22.5	246	0.365
STMT73588-8	3/8" TORQUE WRENCH 10-50Nm	3/8"	10 - 50N-m 9.2-38.7 ft-lb	0.5 N-m	31	409	1.182
STMT73589-8	1/2" TORQUE WRENCH 20-100Nm	1/2"	20 - 100N-m 16.6-75.6 ft-lb	0.5 N-m	31	409	1.19
STMT73590-8	1/2" TORQUE WRENCH 40-200Nm	1/2"	40 - 200N-m 33.2-151.2 ft-lb	1 N-m	41	519	1.6
STMT73591-8	1/2" TORQUE WRENCH 60-340Nm	1/2"	60 - 340N-m 51.6-258.1 ft-lb	2 N-m	41	610	1.785
STMT73592-8	3/4" TORQUE WRENCH 150-750Nm	3/4"	150 - 750N-m 110-550 ft-lb	2.5 N-m	58	1112	5.87

1 MEASURING & LAYOUT TOOLS

2 CUTTING & HOLDING TOOLS

3 FASTENING TOOLS

4 STRIKING & STRUCK TOOLS

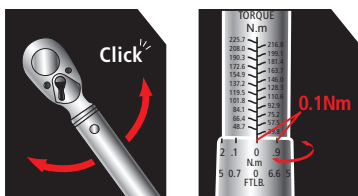
5 PAINTING & FINISHING TOOLS

6 MECHANIC TOOLS

7 TOOLS STORAGE

Dual Way Torque Wrench

# 48 GEAR TEETH FOR SMALL INCREMENT SETTING

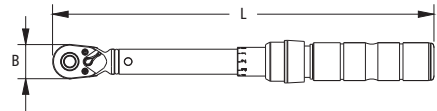


“ THIS TOOL HAS A SMOOTH ACTION AND FINE RATCHET, PLUS THE ABILITY TO TIGHTEN ACCURATELY IN BOTH DIRECTIONS. ”

## 1/4" Torque Wrench 5-25N-m



- ISO 6789, ASME B107.14
- Accuracy: +/- 4%
- Visual and audible indication
- Dual Way direction(C.W./C.C.W.) click Type
- Dual scales (N-m & in-lb.)
- Quick release button
- Adjusting ring locking system
- Aluminum Alloy handle with anodic treatment
- Si-Cr-Mo spring
- Cr-Mo pawl
- Cr-Mo square driver
- 48 Gear teeth

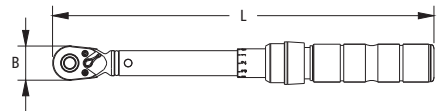


SKU#	DESCRIPTION	Drive Size	Torque Range	Torque Range	Increment	B (mm)	L (mm)	Weight (kg)
STMT73587-8	1/4" Torque Wrench 5-25N-m	1/4"	5-25N-m	48.7-225.7 in-lb.	0.1 N-m	22.5	246	0.365

## 3/8" Torque Wrench 10-50N-m



- ISO 6789, ASME B107.14
- Accuracy: +/- 4%
- Visual and audible indication
- Dual Way direction(C.W./C.C.W.) click Type
- Dual scales (N-m & ft-lb.)
- Quick release button
- Adjusting ring locking system
- Aluminum Alloy handle with anodic treatment
- Si-Cr-Mo spring
- Cr-Mo pawl
- Cr-Mo square driver
- 48 Gear teeth

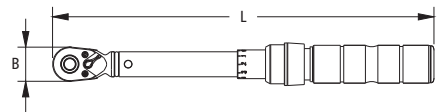


SKU#	DESCRIPTION	Drive Size	Torque Range	Torque Range	Increment	B (mm)	L (mm)	Weight (kg)
STMT73588-8	3/8" Torque Wrench 10-50N-m	3/8"	10-50N-m	9.2-38.7 ft-lb	0.5 N-m	31	409	1.182

## 1/2" Torque Wrench 20-100N-m



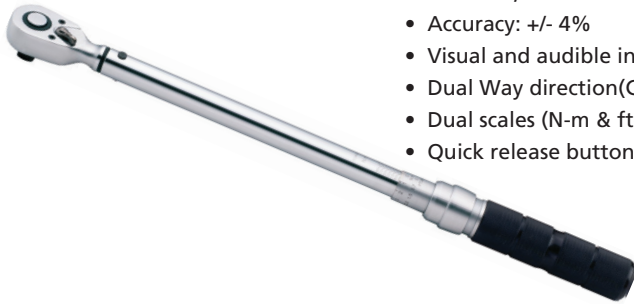
- ISO 6789, ASME B107.14
- Accuracy: +/- 4%
- Visual and audible indication
- Dual Way direction(C.W./C.C.W.) click Type
- Dual scales (N-m & ft-lb)
- Quick release button
- Adjusting ring locking system
- Aluminum Alloy handle with anodic treatment
- Si-Cr-Mo spring
- Cr-Mo pawl
- Cr-Mo square driver
- 48 Gear teeth



SKU#	DESCRIPTION	Drive Size	Torque Range	Torque Range	Increment	B (mm)	L (mm)	Weight (kg)
STMT73589-8	1/2" Torque Wrench 20-100N-m	1/2"	20-100N-m	16.6-75.6 ft-lb	0.5 N-m	31	409	1.19

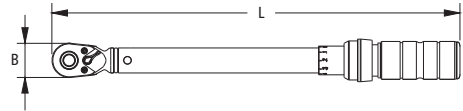
## 6 MECHANIC TOOLS

### 1/2" Torque Wrench 40-200N-m



- ISO 6789, ASME B107.14
- Accuracy: +/- 4%
- Visual and audible indication
- Dual Way direction(C.W./C.C.W.) click Type
- Dual scales (N-m & ft-lb)
- Quick release button

- Adjusting ring locking system
- Aluminum Alloy handle with anodic treatment
- Si-Cr-Mo spring
- Cr-Mo pawl
- Cr-Mo square driver
- 48 Gear teeth



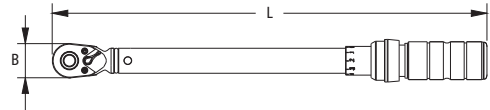
SKU#	DESCRIPTION	Drive Size	Torque Range	Torque Range	Increment	B (mm)	L (mm)	Weight (kg)
STMT73590-8	1/2" Torque Wrench 40-200N-m	1/2"	40-200N-m	33.2-151.2 ft-lb	1 N-m	40	519	1.6

### 1/2" Torque Wrench 60-340N-m



- ISO 6789, ASME B107.14
- Accuracy: +/- 4%
- Visual and audible indication
- Dual Way direction(C.W./C.C.W.) click Type
- Dual scales (N-m & ft-lb.)
- Quick release button

- Adjusting ring locking system
- Aluminum Alloy handle with anodic treatment
- Si-Cr-Mo spring
- Cr-Mo pawl
- Cr-Mo square driver
- 48 Gear teeth



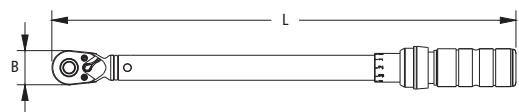
SKU#	DESCRIPTION	Drive Size	Torque Range	Torque Range	Increment	B (mm)	L (mm)	Weight (kg)
STMT73591-8	1/2" Torque Wrench 60-340N-m	1/2"	60-340N-m	51.6-258.1 ft-lb	2 N-m	41	610	1.785

### 3/4" Torque Wrench 150-750N-m



- ISO 6789, ASME B107.14
- Accuracy: +/- 4%
- Visual and audible indication
- Dual Way direction(C.W./C.C.W.) click Type
- Dual scales (N-m & ft-lb)
- Quick release button

- Adjusting ring locking system
- Aluminum Alloy handle with anodic treatment
- Si-Cr-Mo spring
- Cr-Mo pawl
- Cr-Mo square driver
- 48 Gear teeth



SKU#	DESCRIPTION	Drive Size	Torque Range	Torque Range	Increment	B (mm)	L (mm)	Weight (kg)
STMT73592-8	3/4" Torque Wrench 150-750N-m	3/4"	150-750N-m	110-550 ft-lb	2.5 N-m	58	1112	5.87