## TORQUE WRENCHES



MODEL	STW101	STW1011	STW102	STW103	STW104	STW200	STW201.V2	STW1012
No's								

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



## 1. SAFETY

- ✓ Ensure all workshop safety rules, regulations, and conditions are complied with when using the torque wrench.
- Maintain the wrench in good condition and replace any damaged or worn parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ The wrench is a precision tool, handle with care.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ If it is suspected that the wrench is damaged or faulty, have it checked by Sealey or one of our Service Agents.
- **DO NOT** use this wrench unless you have been instructed in its use by a qualified person.
- DO NOT use any cleaner which might affect the high pressure grease with which the wrench is packed.

## 2. INTRODUCTION

Chrome Vanadium steel ratchet head with smooth action mechanism. Calibration tolerance in accordance with BS EN ISO 6789:2003. Scales graduated in both Nm and lb.in/lb.ft. Wrenches are individually tested to standards with ±4% accuracy and each wrench is issued with an individually numbered calibration certificate. Supplied in storage case.

## 3. SPECIFICATION

Model no.	STW101	STW1011	STW102	STW103	STW104	STW200	STW201.V2	STW1012
Nm range	5-25Nm	7-112Nm	40-120Nm	70-420Nm	140-700Nm	10-110Nm	40-210Nm	2-24mm
Imperial	44-221lb.in	5-83lb.ft	30-155lb.ft	52-310lb.ft	103-516lb.ft	10-80lb.ft	30-150lb.ft	1.47-17.7lb.ft
range								
Drive (sq)	1/4"	3/8"	1/2"	3/4"	3/4"	3/8"	1/2"	3/8"
Length	275mm	370mm	460mm	650mm	1070mm	405mm	490mm	275mm
Weight	0.75kg	0.98kg	1.63kg	3.88kg	8.09kg	1.37kg	1.65kg	0.76kg

#### 4. OPERATION

- 4.1. After use adjust to lowest torque setting (but not below), clean and store in a safe, dry, childproof location.
- 4.2. Hold the torque wrench in your left hand (if right handed) so that the required scale on the shaft, just above the hand grip is uppermost and visible.
- 4.3. Turn the lock screw, in the end of the grip, counter-clockwise to unlock grip (STW201.V2 has a locking plug in the end of the grip pull ring to unlock)

Turn grip to select torque setting as follows:

If the required setting - 56Nm. Turn grip until top edge is level with the 50Nm line on the shaft scale and the 'zero' on the grip graduation is aligned with the centre line of the shaft scale.

Rotate the grip further, clockwise, until the '6' on the grip graduation is aligned with the centre line to give a setting of 50 + 6 = 56Nm.

**NOTE:** If using the alternative scale (lb.in, lb.ft or kg.m depending on wrench) then each division of the grip graduation is equivalent to the scale increment divided by the number of divisions. For example (STW1011):

The alternative scale is in lb.ft. Scale increments are 5.16lb.ft. There are 7 grip divisions. Then each division is 5.16/7 = 0.74lb.ft

- 4.4. Tighten the lock screw at the end of the handle to prevent accidental alteration of the setting.
- 4.5. When tightening the nut/bolt you will feel and hear the wrench mechanism click when the set torque is reached. Immediately stop applying force to the wrench to avoid over-tightening the nut/bolt. The wrench will reset ready for the next application.

NOTE: If wrench is not used for some while, operate it a few times, at a low setting, to ensure that all internal parts are coated in grease.

## 5. RECALIBRATION

- 5.1. The default calibration period of 12 months (or 5000 cycles which ever occurs first) starts after the first use of the torque tool (BS EN ISO 6789-1 refers).
- 5.2. Calibration should be checked periodically, depending on use and after any impact or other misuse. Also the interval between tests shall be chosen on the basis such as: maximum permissible deviation, frequency of use, typical load during operation as well as ambient conditions during operation and storage.



# TORQUE TOOL CALIBRATION CERTIFICATE

#### **Declaration of Conformance**

(in accordance with BS EN ISO 6789-1:2017)<sup>1</sup>

Test machine type/name	TORQUE TESTER
Test machine serial No.	4266
Test machine calibration date	2018/6/20
Measurement error <sup>2</sup>	±1%

Measurement uncertainty	0.031kgf.m
Ambient temperature	30°C
Humidity	59 %
Test units: (Nm, lb/ft etc)	Nm

	1	Min Torque:	140			Clasi	avice		
-	L	Max torque:	700	Clockwise					
Test	Test	est Tolerance ± 4 % of Test Load		Completed test reading <sup>3</sup>					
%	Load	Min	Max	1	2	3	4	5	Average
20%	140	134.40	145.60						
60%	420	403.20	436.80						
100%	700	672.00	728.00						

	)	Min Torque:			Anti-clockwise					
		Max torque:		(This part 2 to be completed only where applicable						
Test	Test	Tolerance ± 4 % of Test Load		Completed test reading <sup>3</sup>						
%	Load	Min	Max	1	2	3	4	5	Average	
20%	0	0.00	0.00							
60%	0	0.00	0.00							
100%	0	0.00	0.00							

Tool Model Number	STW104
Tool Serial Number	
Tested by (print name)	John Li
Date of test <sup>4</sup>	

**Notes:** <sup>1</sup>Testing is in compliance with International Standard procedures, with test equipment calibrated by a laboratory traceable to International Standards.

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#### **ENVIRONMENT PROTECTION**

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

**Note**: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: This product comes with a lifetime guarantee against manufacturing defects.

Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR

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<sup>&</sup>lt;sup>2</sup> Measurement error shall be less than ¼ of the maximum permissible relative deviation of the torque tool.

<sup>&</sup>lt;sup>3</sup> The observed values fall within the maximum permissible deviation (tolerance). For tools with a flexible head, the result is valid only if the measuring axis is perpendicular to the axis of the tool.

<sup>&</sup>lt;sup>4</sup> This Sealey Declaration of Conformance is issued at the time of manufacture. Its' validity is open ended until the torque tool is used for the first time. The default re-calibration period of 12 months (or 5,000 cycles, whichever occurs first) starts after first use of the torque tool (BS EN ISO 6789-1:2017, clause 5.3 refers).