



TORQUE WRENCHES

| | | | | | | | | | |
|------------|--------|---------|--------|--------|--------|--------|-----------|--------|---------|
| MODEL No's | STW101 | STW1011 | STW102 | STW103 | STW104 | STW200 | STW201.V2 | STW202 | STW1012 |
|------------|--------|---------|--------|--------|--------|--------|-----------|--------|---------|

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions and maintained properly, 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.



Read instruction manual

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.*
- x The wrench is a precision tool, **DO NOT** abuse it. **DO NOT** drop or throw the wrench.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- WARNING! DO NOT** use the wrench if damaged or thought to be faulty (contact Service Agent).
- x **DO NOT** use wrench unless you have been instructed in its use by a qualified person.
- x **DO NOT** use any cleaner which might affect the high pressure grease with which the wrench is packed.
- ✓ After use adjust to lowest torque setting (but not below), clean and store in a safe, dry, childproof location.

2. INTRODUCTION

Chrome Vanadium steel ratchet head with smooth action mechanism. Calibration tolerance in accordance with BS EN ISO 6789-1:2017. Scales graduated in both Nm and lb.in/lb.ft. Wrenches are individually tested to standards with $\pm 4\%$ accuracy and each wrench is issued with an individually numbered test certificate. Supplied in storage case.

3. SPECIFICATION

| | | | | | | | | | |
|-------------------|-------------|-----------|-------------|-------------|--------------|------------|-------------|-------------|----------------|
| Model No. | STW101 | STW1011 | STW102 | STW103 | STW104 | STW200 | STW201.V2 | STW202 | STW1012 |
| Torque Range (Nm) | 5-25 | 7-112 | 40-210 | 70-420 | 140-700 | 10-110 | 40-210 | 50-560 | 2-24 |
| Alternative Scale | 44-221lb.in | 5-83lb.ft | 30-155lb.ft | 52-310lb.ft | 103-516lb.ft | 10-80lb.ft | 30-150lb.ft | 50-400lb.ft | 1.47-17.7lb.ft |
| Drive (sq) | 1/4" | 3/8" | 1/2" | 3/4" | 3/4" | 3/8" | 1/2" | 3/4" | 3/8" |
| Length (mm) | 275 | 370 | 460 | 650 | 1070 | 405 | 490 | 675 | 275 |

4. OPERATION

- 4.1. 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.
- 4.2. 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).
- 4.3. Turn grip to select torque setting as follows:
 - 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 $50 + 6 = 56\text{Nm}$.

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 $5.16/7 = 0.74\text{lb.ft}$
- 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 To ensure continued accuracy the wrench should be recalibrated after a suitable period, depending on use and after any impact or other misuse. Contact your Sealey stockist or a NAMAS accredited laboratory.

| Pounds Feet (lb.ft) | Kilogram Meters (kgm) | Newton Meters (Nm) | Newton Meters (Nm) | Pounds Feet (lb.ft) | Kilogram Meters (kgm) | Kilogram Meters (kgm) | Newton Meters (Nm) | Pounds Feet (lb.ft) |
|------------------------|--------------------------|-----------------------|-----------------------|------------------------|--------------------------|--------------------------|-----------------------|------------------------|
| 5 | 0.69 | 6.78 | 10 | 7.38 | 1.02 | 1 | 9.81 | 7.23 |
| 10 | 1.38 | 13.56 | 20 | 14.75 | 2.04 | 2 | 19.61 | 14.47 |
| 15 | 2.07 | 20.34 | 30 | 22.13 | 3.06 | 3 | 29.43 | 21.70 |
| 20 | 2.76 | 27.12 | 40 | 29.50 | 4.08 | 4 | 39.23 | 28.93 |
| 25 | 3.46 | 33.90 | 50 | 36.88 | 5.10 | 5 | 49.04 | 36.17 |
| 30 | 4.15 | 40.68 | 60 | 44.26 | 6.12 | 6 | 58.84 | 43.40 |
| 35 | 4.84 | 47.46 | 70 | 51.63 | 7.14 | 7 | 68.65 | 50.63 |
| 40 | 5.53 | 54.24 | 80 | 59.01 | 8.16 | 8 | 78.46 | 47.87 |
| 45 | 6.22 | 61.02 | 90 | 66.38 | 9.18 | 9 | 88.26 | 65.10 |
| 50 | 6.91 | 67.80 | 100 | 73.76 | 10.20 | 10 | 98.07 | 72.33 |
| 55 | 7.60 | 74.58 | 110 | 81.14 | 11.22 | 11 | 107.88 | 79.57 |
| 60 | 8.29 | 81.36 | 120 | 88.51 | 12.24 | 12 | 117.68 | 86.80 |
| 65 | 8.98 | 88.14 | 130 | 95.89 | 13.26 | 13 | 127.49 | 94.03 |
| 70 | 9.67 | 94.92 | 140 | 103.26 | 14.28 | 14 | 137.30 | 101.27 |
| 75 | 10.37 | 101.70 | 150 | 110.64 | 15.30 | 15 | 147.11 | 108.50 |
| 80 | 11.06 | 108.48 | 160 | 118.02 | 16.32 | 16 | 156.91 | 115.74 |
| 85 | 11.75 | 115.26 | 170 | 125.39 | 17.34 | 17 | 166.72 | 122.97 |
| 90 | 12.44 | 122.04 | 180 | 132.77 | 18.36 | 18 | 176.53 | 130.20 |
| 95 | 13.13 | 128.82 | 190 | 140.14 | 19.38 | 19 | 186.33 | 137.43 |
| 100 | 13.82 | 135.60 | 200 | 147.52 | 20.40 | 20 | 196.14 | 144.67 |
| 105 | 14.51 | 142.38 | 210 | 154.90 | 21.42 | 21 | 205.95 | 151.90 |
| 110 | 15.20 | 149.16 | 220 | 162.27 | 22.44 | 22 | 215.75 | 159.13 |
| 115 | 15.89 | 155.94 | 230 | 169.65 | 23.46 | 23 | 225.37 | 166.37 |
| 120 | 16.58 | 162.72 | 240 | 177.02 | 24.48 | 24 | 235.37 | 173.60 |
| 125 | 17.28 | 169.50 | 250 | 184.40 | 25.50 | 25 | 245.18 | 180.84 |
| 130 | 17.97 | 176.28 | 260 | 191.78 | 26.52 | 26 | 254.98 | 188.08 |
| 135 | 18.66 | 183.06 | 270 | 199.15 | 27.54 | 27 | 264.79 | 195.30 |
| 140 | 19.35 | 189.84 | 280 | 206.53 | 28.56 | 28 | 274.60 | 202.54 |
| 145 | 20.04 | 196.62 | 290 | 213.91 | 29.58 | 29 | 284.41 | 209.77 |
| 150 | 20.73 | 203.40 | 300 | 221.29 | 30.60 | 30 | 294.22 | 217.00 |
| 155 | 21.42 | 210.18 | 310 | 228.57 | 31.62 | 31 | 304.03 | 224.23 |
| 160 | 22.11 | 216.96 | 320 | 236.05 | 32.64 | 32 | 313.84 | 231.46 |
| 165 | 22.80 | 223.74 | 330 | 243.43 | 33.66 | 33 | 323.65 | 238.69 |
| 170 | 23.49 | 230.52 | 340 | 250.81 | 34.68 | 34 | 333.46 | 245.92 |
| 175 | 24.19 | 237.70 | 350 | 258.30 | 35.70 | 35 | 343.35 | 253.05 |
| 180 | 24.88 | 244.08 | 360 | 265.68 | 36.72 | 36 | 353.16 | 260.28 |
| 185 | 25.57 | 250.86 | 370 | 273.06 | 37.74 | 37 | 362.97 | 267.51 |
| 190 | 26.26 | 257.64 | 380 | 280.44 | 38.76 | 38 | 372.78 | 274.74 |
| 195 | 26.59 | 264.42 | 390 | 287.82 | 39.78 | 39 | 382.59 | 281.97 |
| 200 | 27.64 | 271.20 | 400 | 295.20 | 40.80 | 40 | 392.40 | 289.20 |
| 205 | 28.33 | 277.98 | 410 | 302.58 | 41.82 | 41 | 402.21 | 296.43 |
| 210 | 29.02 | 284.76 | | | | | | |
| 215 | 29.71 | 291.54 | | | | | | |
| 220 | 30.40 | 298.32 | | | | | | |
| 225 | 31.09 | 305.10 | | | | | | |
| 230 | 31.78 | 311.88 | | | | | | |
| 235 | 32.47 | 318.66 | | | | | | |
| 240 | 33.16 | 325.44 | | | | | | |
| 245 | 33.85 | 332.22 | | | | | | |
| 250 | 34.54 | 339.00 | | | | | | |
| 260 | 35.88 | 352.56 | | | | | | |
| 270 | 37.26 | 366.12 | | | | | | |
| 280 | 38.64 | 379.68 | | | | | | |
| 290 | 40.02 | 393.24 | | | | | | |
| 300 | 41.40 | 406.80 | | | | | | |

**TORQUE WRENCH
UNITS OF MEASUREMENT
CONVERSION
TABLES**

6. CALIBRATION CERTIFICATE



TORQUE TOOL CALIBRATION CERTIFICATE

Declaration of Conformance
(in accordance with BS EN ISO 6789-1:2017)¹

| | | | |
|--------------------------------|---------------|-----------------------------|------------|
| Test machine type/name | TORQUE TESTER | Measurement uncertainty | 0.031kgf.m |
| Test machine serial No. | 4266 | Ambient temperature | 30 °C |
| Test machine calibration date | 2022/6/20 | Humidity | 59 % |
| Measurement error ² | ±1% | Test units: (Nm, lb/ft etc) | Nm |

| | | | | | | | | | |
|----------|-------------|------------------------------|------------------|-------------------------------------|---|---|---|---|---------|
| 1 | Min Torque: | 5 | Clockwise | | | | | | |
| | Max torque: | 25 | | | | | | | |
| Test % | Test Load | Tolerance ± 4 % of Test Load | | Completed test reading ³ | | | | | |
| | | Min | Max | 1 | 2 | 3 | 4 | 5 | Average |
| 20% | 5 | 4.80 | 5.20 | | | | | | |
| 60% | 15 | 14.40 | 15.60 | | | | | | |
| 100% | 25 | 24.00 | 26.00 | | | | | | |

| | | | | | | | | | |
|----------|-------------|------------------------------|--|-------------------------------------|---|---|---|---|---------|
| 2 | Min Torque: | | Anti-clockwise (This part 2 to be completed only where applicable) | | | | | | |
| | Max torque: | | | | | | | | |
| Test % | Test Load | Tolerance ± 4 % of Test Load | | Completed test reading ³ | | | | | |
| | | 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 | STW101 |
| Tool Serial Number | |
| Tested by (print name) | John Li |
| Date of test ⁴ | |

- Notes: ¹ Testing is in compliance with International Standard procedures, with test equipment calibrated by a laboratory traceable to International Standards.
- ² Measurement error shall be less than ¼ of the maximum permissible relative deviation of the torque tool.
- ³ 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.
- ⁴ 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).

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.

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