

SQUARE DRIVE HYDRAULIC TORQUE WRENCHES

BOLTING SOLUTIONS

T

REVERSIBLE SQUARE DRIVE

for tightening and loosening applications

360° X 180° SWIVEL

with screw couplings

ADJUSTABLE REMOVABLE CARRY HANDLE

included with TW3
to TW10 models for
enhanced safety
and efficiency



All wrenches supplied with
a calibration certificate
of accuracy, traceable to
international standards.
Refer to Calibration &
Certification section at the
rear of the catalogue.

THE **TW-SERIES** SQUARE DRIVE HYDRAULIC TORQUE WRENCHES ARE COMPACT, EASY TO USE AND VERSATILE.

The titanium-aluminium alloy and super high strength steel alloy construction means increased strength and durability while minimising weight. TW-Series torque wrenches are available in ¾" to 2 ½" square drive models, with a torque range from 112 to 72,000 Newton Metres (82 to 53,280 ft/lb). All models are fitted with a 360° x 180° swivel coupler and screw couplings. A convenient Carry Case is included for models TW07 to TW10.

TITANIUM ALUMINIUM ALLOY

and super high strength
steel construction

ACCURACY

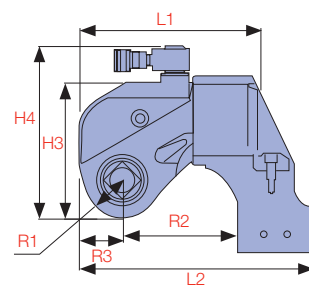
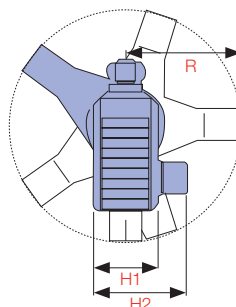
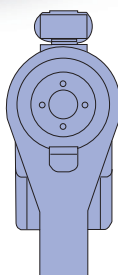
within + / - 3%

TW8



EXTENDED REACTION ARM

available as an optional extra



| Model No. | Square Drive | Range of Torque @ 700 bar (Nm) | Range of Torque @ 700 bar (ft/lb) | Bolt Size Range (mm) | L1 | L2 | H1 | H2 | H3 | H4 | R | R1 | R2 | R3 | Weight (kg) |
|-----------|--------------|--------------------------------|-----------------------------------|----------------------|-----|-----|-----|-----|-----|-----|-------|------|-------|------|-------------|
| TW07 | ¾" | 112 - 1,120 | 82 - 829 | 14 - 30 | 111 | 140 | 42 | 66 | 76 | 109 | 75.0 | 20.5 | 68.3 | 25.0 | 1.8 |
| TW1 | ¾" | 183 - 1,837 | 135 - 1,359 | 16 - 36 | 145 | 174 | 50 | 72 | 96 | 131 | 91.5 | 26.0 | 85.0 | 33.5 | 2.5 |
| TW3 | 1" | 451 - 4,512 | 334 - 3,346 | 22 - 48 | 178 | 230 | 68 | 95 | 127 | 176 | 123.5 | 34.0 | 114.0 | 40.0 | 5.0 |
| TW5 | 1-1/2" | 752 - 7,528 | 557 - 5,571 | 27 - 56 | 211 | 271 | 80 | 123 | 149 | 199 | 140.0 | 39.0 | 137.0 | 46.5 | 8.0 |
| TW8 | 1-1/2" | 1,078 - 10,780 | 797 - 7,977 | 30 - 64 | 222 | 293 | 90 | 134 | 167 | 217 | 165.0 | 47.0 | 153.0 | 52.0 | 11.0 |
| TW10 | 1-1/2" | 1,551 - 15,516 | 1,148 - 11,482 | 36 - 72 | 246 | 318 | 100 | 142 | 182 | 232 | 178.0 | 51.0 | 154.0 | 58.5 | 15.0 |
| TW15 | 2-1/2" | 2,063 - 20,627 | 1,521 - 15,213 | 39 - 80 | 285 | 395 | 110 | 178 | 200 | 246 | 196.0 | 55.0 | 222.0 | 65.0 | 21.0 |
| TW20 | 2-1/2" | 2,666 - 26,664 | 1,973 - 19,731 | 42 - 90 | 308 | 384 | 120 | 183 | 220 | 270 | 213.0 | 59.0 | 186.0 | 71.0 | 26.5 |
| TW25 | 2-1/2" | 3,472 - 34,725 | 2,569 - 25,697 | 48 - 100 | 323 | 401 | 137 | 200 | 247 | 297 | 228.0 | 66.0 | 199.0 | 72.5 | 35.0 |
| TW35 | 2-1/2" | 4,866 - 48,666 | 3,601 - 36,013 | 64 - 120 | 373 | 466 | 153 | 216 | 282 | 332 | 243.5 | 77.0 | 241.0 | 89.5 | 50.0 |
| TW50 | 2-1/2" | 7,200 - 72,000 | 5,328 - 53,280 | 72 - 125 | 400 | 516 | 160 | 223 | 291 | 341 | 258.0 | 81.0 | 259.0 | 97.5 | 87.0 |

OIL COOLER

electric fan operated for continuous duty operation

ROLL CAGE

for portability and protection

3 STAGE POWER UNIT

for increased speed under load

6 M REMOTE PENDANT

through a 24 Volt transformer for safety. Incorporates motor ON/OFF button and ADV/AUTO RETRACT button

THE **DET & DAT-SERIES** TORQUE WRENCH POWER UNITS ARE PERFECTLY DESIGNED FOR OPERATING THE TW AND LPC -SERIES HYDRAULIC TORQUE WRENCHES.

They have a three stage pump for faster operation under load and incorporate a hydraulic oil cooler providing cool operation under continuous use. A 6 M remote hand pendant is standard. Standard (-1114) models can operate one or two tools at one time due to the multi outlet pump block. The DET-1114-4 four outlet version allows 1 - 8 tools to be operated at one time.

ELECTRIC MOTOR

1.5 kW/230 Volt 50Hz induction motor 9.2 amp

LIQUID FILLED PRESSURE GAUGE

has 1% accuracy and can be recalibrated. Scale is MPa/psi

ADJUSTABLE TORQUE CONTROL

for accurate torque settings

MULTIPLE TOOL OUTLETS

for operating one or two tools simultaneously

DET-1114-4

for operating 1 - 4 tools simultaneously



DET-1114



| Model No. | Motor | Pressure Rating (bar) | Flow (Lpm) | | | Oil Capacity (L) | Dry Weight (kg) | Dimensions W x L x H (mm) |
|------------|---------------------------|-----------------------|---------------------|-----------------------|-----------------------|------------------|-----------------|---------------------------|
| | | | 1st Stage 0-100 bar | 2nd Stage 100-250 bar | 3rd Stage 250-700 bar | | | |
| DAT-1114 | 2.7 kW Air | 700 | 7.0 | 1.6 | 0.8 | 7.0 | 31.5 | 340 x 530 x 500 |
| DET-1114 | 230 Volt / 1 Ph. / 50 Hz† | 700 | 8.5 | 2.2 | 1.1 | 5.5 | 28.0 | |
| DET-1114-4 | 230 Volt / 1 Ph. / 50 Hz† | 700 | 8.5 | 2.2 | 1.1 | 5.5 | 28.0 | |

† Standard motor supplied is 230V, 50 Hz, should 115V, 60 Hz be required; add "-115V" to the end of the model number, eg. "DET-1114-4-115V"

LIQUID FILLED PRESSURE GAUGE

has 1% accuracy and can be recalibrated. Scale is MPa/psi

AIR MOTOR

2.7 kW Ingersoll Rand®

ADJUSTABLE TORQUE CONTROL

for accurate torque settings

MULTIPLE TOOL OUTLETS

for operating one or two tools simultaneously

ROLL CAGE

for portability and protection

AIR FILTER/ LUBRICATOR

for efficient operation

3 STAGE PUMP

for increased speed under load

OIL COOLER

keeps oil cool during heavy duty operation

6 M REMOTE PENDANT

incorporates motor ON/OFF button and ADV/AUTO RETRACT button

DAT-1114



POWER REQUIREMENT
Electric 230 Volt 50 Hz
Air 1,400 Lpm @ 6.2 bar

FLOW
3 stage

MAXIMUM OPERATING PRESSURE
700 bar

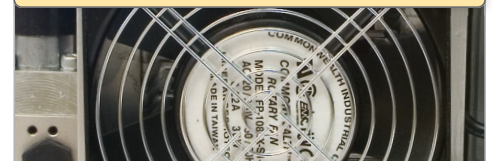
Torque Wrench Hoses

| Model No. | Length (m) | Description |
|-----------|------------|--|
| TWH-04 | 4 | Twin hose set to suit torque wrenches complete with male and female screw couplers at both ends. 700 bar working pressure. 2,800 bar min. burst. |
| TWH-06 | 6 | |
| TWH-10 | 10 | |
| TWH-15 | 15 | |



Hose burst sleeve available. Consult Durapac for further information

The **DET & DAT** hydraulic torque wrench power units are supplied with an oil cooler to allow continuous operation of hydraulic torque wrenches



Torque Wrench Couplings

| Model No. | Thread | Description | Suits Tool Model No. |
|-----------|-----------------|---|--|
| CH-2 | 1/8"-NPT Male | Male half screw coupling complete with metal dust cap* | TW07, TW1, LPC2 |
| CR-2 | 1/8"-NPT Male | Female half screw coupling complete with metal dust cap* | TW07, TW1, LPC2 |
| CS-2 | 1/8"-NPT Male | Coupling set with metal dust caps* includes CH-2 and CR-2 | TW07, TW1, LPC2 |
| CH-4 | 1/4"-NPT Female | Male half screw coupling complete with metal dust cap* | TW3 THROUGH TW50 LPC4 THROUGH LPC30 |
| CR-4 | 1/4"-NPT Male | Female half screw coupling complete with metal dust cap* | TW3 THROUGH TW50 LPC4 THROUGH LPC30 |
| CS-4 | | Coupling set with metal dust caps* includes CH-4 and CR-4 | TW3 THROUGH TW50 LPC4 THROUGH LPC30 |

Snap couplings available. Consult Durapac for further information

* Dust cap/s not shown

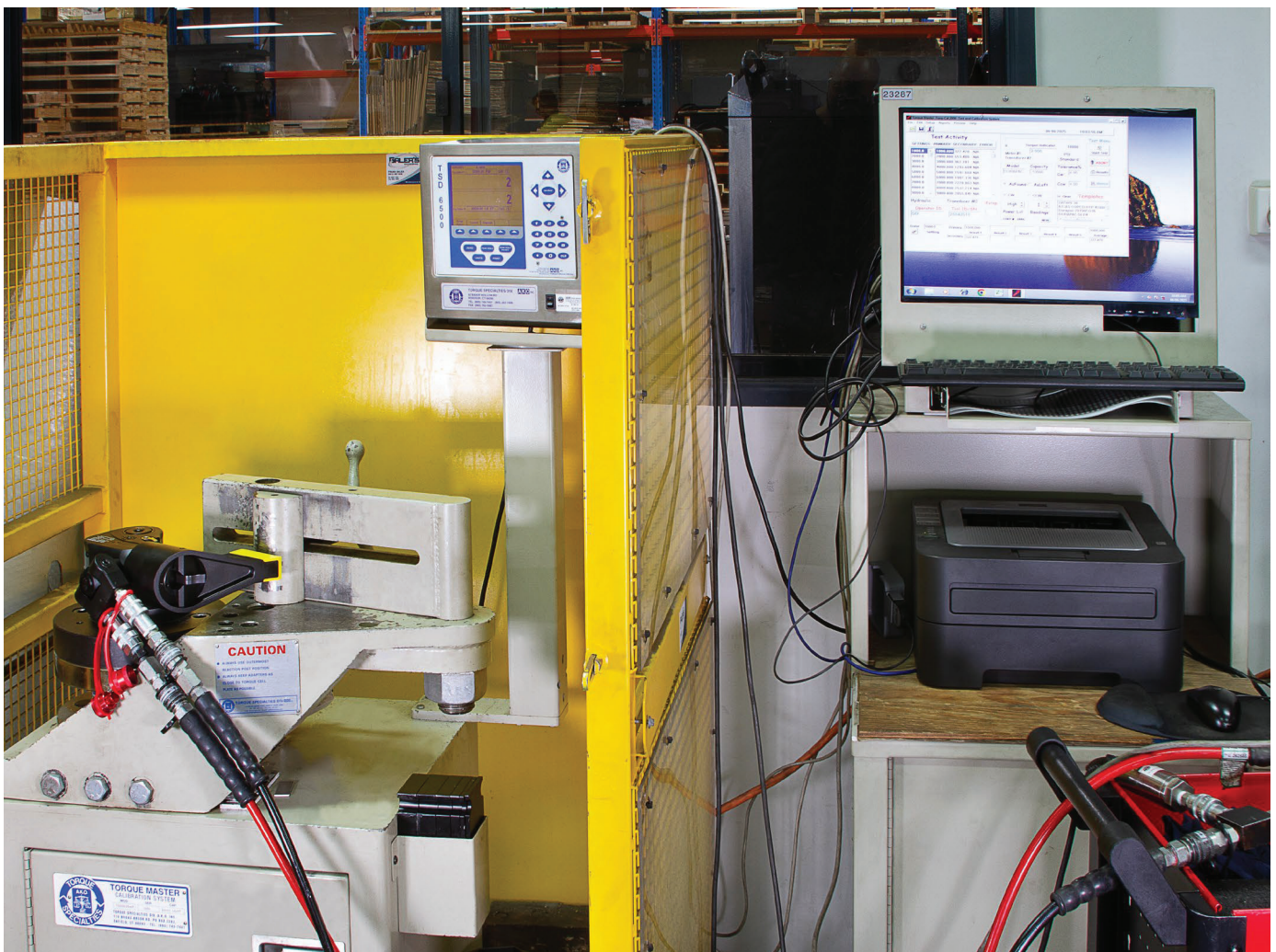




TORQUE CALIBRATION SYSTEM

HYDRAULIC TORQUE WRENCH TOOLS ARE A WIDELY ACCEPTED AND USED DEVICE FOR TIGHTENING AND LOOSENING MEDIUM TO LARGE BOLTS WITH UP TO 72,000 NM OF TORQUE.

The range of applications is very diverse and hydraulic torque wrench tools can be seen in operation in almost every part of industry. Many of these applications are of a critical nature and demand a tool that is not only accurate and reliable, but also certified to be accurate. To ensure all Durapac TW and LPC-Series torque wrenches meet our clients' high expectations, each tool is supplied with a calibration certificate of accuracy that is traceable to international standards. Each test is performed on a calibration rig that has an accuracy of 0.1% and the tool serial number is cross referenced to the test certificate.



CERTIFICATE OF ACCURACY

BELOW IS A SAMPLE CERTIFICATE THAT IS TRACEABLE TO INTERNATIONAL STANDARDS. ALL TW & LPC HYDRAULIC TORQUE WRENCHES ARE SUPPLIED WITH A CERTIFICATE OF ACCURACY.

ABSOLUTE EQUIPMENT PTY LTD
 ABN 69 135 679 195
 73 NORTHLINK PL
 VIRGINIA QLD 4014
 TEL: (07) 3865 4006

DURAPAC

Certificate of Accuracy

| PRIMARY | SECONDARY | PRIMARY | SECONDARY | PRIMARY | SECONDARY | PRIMARY | SECONDARY | PRIMARY | SECONDARY |
|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| 1000.00 | 490.00 | 2000.00 | 924.00 | 3000.00 | 1334.00 | 4000.00 | 1792.00 | 5000.00 | 2242.00 |
| 1100.00 | 533.40 | 2100.00 | 965.00 | 3100.00 | 1379.80 | 4100.00 | 1837.00 | 5100.00 | 2285.80 |
| 1200.00 | 576.80 | 2200.00 | 1006.00 | 3200.00 | 1425.60 | 4200.00 | 1882.00 | 5200.00 | 2329.60 |
| 1300.00 | 620.20 | 2300.00 | 1047.00 | 3300.00 | 1471.40 | 4300.00 | 1927.00 | 5300.00 | 2373.40 |
| 1400.00 | 663.60 | 2400.00 | 1088.00 | 3400.00 | 1517.20 | 4400.00 | 1972.00 | 5400.00 | 2417.20 |
| 1500.00 | 707.00 | 2500.00 | 1129.00 | 3500.00 | 1563.00 | 4500.00 | 2017.00 | 5500.00 | 2461.00 |
| 1600.00 | 750.40 | 2600.00 | 1170.00 | 3600.00 | 1608.80 | 4600.00 | 2062.00 | 5600.00 | 2504.80 |
| 1700.00 | 793.80 | 2700.00 | 1211.00 | 3700.00 | 1654.60 | 4700.00 | 2107.00 | 5700.00 | 2548.60 |
| 1800.00 | 837.20 | 2800.00 | 1252.00 | 3800.00 | 1700.40 | 4800.00 | 2152.00 | 5800.00 | 2592.40 |
| 1900.00 | 880.60 | 2900.00 | 1293.00 | 3900.00 | 1746.20 | 4900.00 | 2197.00 | 5900.00 | 2636.20 |

| P.S.I. | NM | P.S.I. | NM | P.S.I. | NM | P.S.I. | NM | P.S.I. | NM |
|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| 6000.00 | 2680.00 | 7000.00 | 3132.00 | 8000.00 | 3582.00 | 9000.00 | 4046.00 | 10000.00 | 4488.00 |
| 6100.00 | 2725.20 | 7100.00 | 3177.00 | 8100.00 | 3628.40 | 9100.00 | 4090.20 | | |
| 6200.00 | 2770.40 | 7200.00 | 3222.00 | 8200.00 | 3674.80 | 9200.00 | 4134.40 | | |
| 6300.00 | 2815.60 | 7300.00 | 3267.00 | 8300.00 | 3721.20 | 9300.00 | 4178.60 | | |
| 6400.00 | 2860.80 | 7400.00 | 3312.00 | 8400.00 | 3767.60 | 9400.00 | 4222.80 | | |
| 6500.00 | 2906.00 | 7500.00 | 3357.00 | 8500.00 | 3814.00 | 9500.00 | 4267.00 | | |
| 6600.00 | 2951.20 | 7600.00 | 3402.00 | 8600.00 | 3860.40 | 9600.00 | 4311.20 | | |
| 6700.00 | 2996.40 | 7700.00 | 3447.00 | 8700.00 | 3906.80 | 9700.00 | 4355.40 | | |
| 6800.00 | 3041.60 | 7800.00 | 3492.00 | 8800.00 | 3953.20 | 9800.00 | 4399.60 | | |
| 6900.00 | 3086.80 | 7900.00 | 3537.00 | 8900.00 | 3999.60 | 9900.00 | 4443.80 | | |

Comments DO NOT EXCEED MAXIMUM DESIGN TORQUE CAPACITY OF 4512 NM

Test Date 12/05/2020
Operator RENE BERNIS
Wrench Due Date 12/05/2020

Customer HURLY GOLD MINE
Address
City/State/Zip ALICE SPRINGS, NT 0870
Country AUSTRALIA
Model No DURAPAC TW3
Description HYDRAULIC TORQUE WRENCH

Temperature N/A
Humidity N/A
Wrench ID 8325
CERT # 133

Tested and Certified By: Print Date: 12/05/2020
 Date Signed: 12/05/2020 **** THIS CERTIFICATE MAY BE REPRODUCED ONLY IN IT'S ENTIRETY ****

ABSOLUTE EQUIPMENT PTY LTD
 ABN 69 135 679 195
 73 NORTHLINK PL
 VIRGINIA QLD 4014
 TEL: (07) 3865 4006

DURAPAC

Certificate of Accuracy

Customer HURLY GOLD MINE
Address
City/State/Zip ALICE SPRINGS, NT 0870
Country AUSTRALIA
Model No DURAPAC TW3
Description HYDRAULIC TORQUE WRENCH

Testing Procedure Testing is performed by attaching the above ref torque wrench to AKO model TSD 20035-HT Hydraulic / Pneumatic torque wrench test equipment in accordance with Specialised Force test procedure.

Test equipment used:-
 TSD 20011 Torque Transducer s/n 3650, 0.1 % IV accuracy, last calibration certificate # 128620 dated 14/3/2006,
 TSD 6000-1 Torque Indicator s/n 40823, 0.1 % IV accuracy, last calibration certificate # 128620 dated 14/3/2006,
 TSD 10KPT Pressure Transducer s/n 44815, 0.1 % IV accuracy, last calibration certificate # 134681 dated 16/4/2007 with
 TSD 6000-2 Pressure Indicator s/n 28073, 0.1 % IV accuracy, last calibration certificate # 134681 dated 16/4/2007
 Traceability to NIST (National Institute of Standards and Technology) # 822/256626-02.

Comments DO NOT EXCEED MAXIMUM DESIGN TORQUE CAPACITY OF 4512 NM

CERT 133
Test Date 12/05/2020
Customer PO# 5643
Serial # 8325
Primary Standard PSI
Operator RENE BERNIS
Secondary Standard NM

| SETTING | PRIMARY | SECONDARY |
|---------|---------|-----------|
| 1000 | 1000 | 490 |
| 2000 | 2000 | 924 |
| 3000 | 3000 | 1334 |
| 4000 | 4000 | 1792 |
| 5000 | 5000 | 2242 |
| 6000 | 6000 | 2680 |
| 7000 | 7000 | 3132 |
| 8000 | 8000 | 3582 |
| 9000 | 9000 | 4046 |
| 10000 | 10000 | 4488 |

Tested and Certified By: Print Date: 12/05/2020
 Date Signed: 12/05/2020 **** THIS CERTIFICATE MAY BE REPRODUCED ONLY IN IT'S ENTIRETY ****