



**BOLTING SOLUTION COMPANY**

# TORQUE WRENCH CATALOG

## ■ TORQUE WRENCH

TORQUE WRENCH, PRESET TYPE

TORQUE WRENCH, PRESET TYPE  
(DIGITAL READING)

TORQUE WRENCH, PRESET TYPE  
(FOR BOTH OF R&L HAND THREADS)

TORQUE WRENCH, PRESET TYPE  
(DIGITAL READING FOR BOTH OF  
R&L HAND THREADS)

TORQUE WRENCH, SINGLE PURPOSE TYPE

TORQUE WRENCH, PRESET OPEN END SPANNER

TORQUE WRENCH, ADJUSTABLE WRENCH TYPE  
(DIGITAL READING)

## ■ DIGITORQON TDT-SERIES

## ■ DIGITORQON HDT-SERIES

## ■ DIGITORQON DBDT-SERIES

## ■ TORQUE WRENCH CHECKER

## ■ TORQUE WRENCH TESTING MACHINE



# No.1505

**TONE CO., LTD.**

# BLACK&RED

## RENOVATION COLOR



### STYLISH BLACK COLOR

Sticker color shows the size of square drive.

NEW PRODUCT  
For R&L Hand Threads  
Single Purpose Type



### CLICK SOUND & LIGHT RETROACTION

TONE torque wrench is first in the industry!  
Easy to set the torque by turning the torque setting knob and prevents unintended alteration of setting torque.



Visible Indicator



Used in various fields like industry and motor sports (jet ski) etc...



### This test machine is easy to check torque at any time.

Easy to read on the LED screen and realizes high accuracy ( $\pm 1\%$ ).  
Compact size realizes install many testers in space saving.  
TONE focus on not only torque wrench but also peripheral equipments.

# TORQUE WRENCH

## TORQUE WRENCH



DIGITORQON  
TDT-SERIES  
**P3**



DIGITORQON  
HDT-SERIES  
**P4**



DIGITORQON  
DBDT-SERIES  
**P5**



TORQUE WRENCH,  
PRESET TYPE  
**P7~12**



TORQUE WRENCH,  
SINGLE PURPOSE TYPE  
**P13**



TORQUE WRENCH,  
PRESET OPEN END  
SPANNER  
**P14**



TORQUE WRENCH,  
ADJUSTABLE WRENCH TYPE  
(TORQUE WRENCH, PRESET  
OPEN END SPANNER) **P15**



TORQUE WRENCH  
CHECKER  
**P16**



TORQUE WRENCH  
TESTING MACHINE  
**P17**

**DIGITORQON TDT-series Functions and Features**

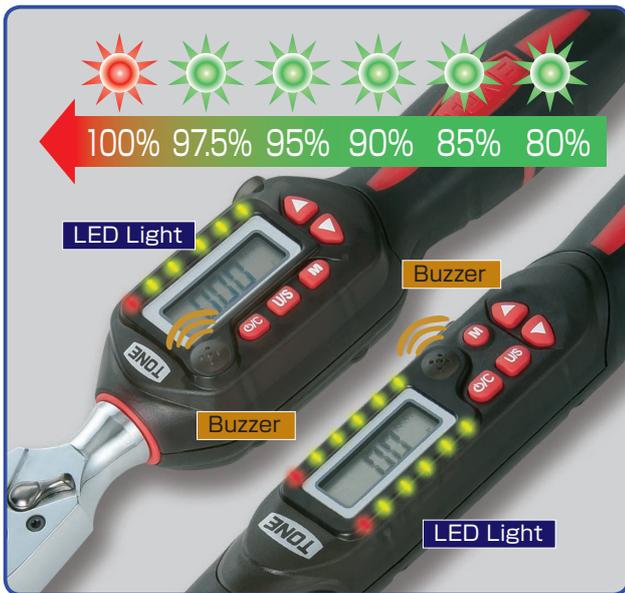
A wide range of controllable torque (6 N.m~850N.m) available with 9 models.



- **Tightening Condition Monitoring Function**  
LCD display, beep sound and LED light alert when reaching the target torque.
- **Pass & Fail Function**  
Total 9 preset torque values registrable.
- **USB Data Transfer Function**      ● **Works in both CW and CCW directions.**  
Connect to PC by USB cable. Tightening torque date stored on the PC in CSV format.
- **Measurement Mode Change Function**  
"Tracking Mode" and "Peak Mode" available.
- **Calibration Certificate Included**  
Calibration Certificate with Traceability based on the National Standard.

TORQUE WRENCH

TORQUE WRENCH CHECKER / TORQUE WRENCH TESTING MACHINE



**LED Light (Red & Green) · Beep Sound**

LED Light (Red & Green) , Beep Sound and LED display notify the tightening status. When reaching 80% of the target torque, Green LED light is ON. Beep Sound is also ON and OFF, LED Light: Red LED is ON at 100% of the target torque.



**Data Transfer Function**

Transfer Data in CSV format to PC.  
**Track Mode** Displayed torque value in accordance with applying torque.  
**Peak Mode** Display the max. torque applied.



**Socket Hold Mechanism**

Hold socket tightly but easy to exchange.



**Hole for safe rope installed**

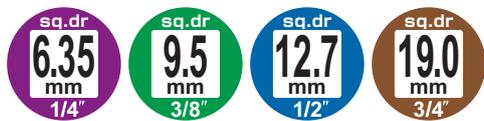
Suitable for the operation at high working place.



**Convenient plastic case for storing or carrying.**

# DIGITORQON TDT-SERIES

DIGITORQON TDT-series is a digital torque measurement device with ratchet. Digital LED display enable easy torque management. Alert by beeping sound when reaching the target torque. Data transfer function available.

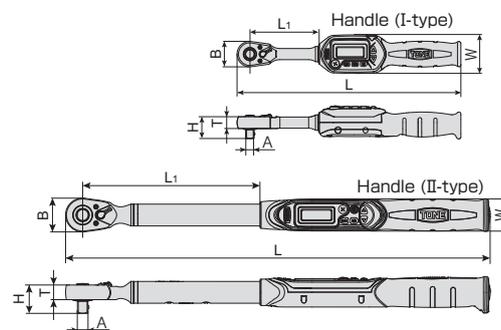


Model	Torque Range Min.-Max. (N·m)	Min. Torque (N·m)	Increment (N·m)	Unit (*1)	Handle Type	Square Drive dr. A (mm)	Dimensions (mm)						Weight (kg) (*2)
							B	H	T	W	L	L <sub>1</sub>	
T2DT30H	6 ~ 30	0.3 ~	0.01	N·m	I	6.35	22.5	19.5	10.3	47	221	38	0.36
T3DT60H	12 ~ 60	0.3 ~	0.01	N·m	I	9.5	31.0	26.5	14.5	47	229	42	0.45
T3DT85H	17 ~ 85	3 ~	0.1	N·m	I	9.5	31.0	26.5	14.5	47	271	84	0.51
T3DT135H	27 ~ 135	3 ~	0.1	N·m	I	9.5	31.0	26.5	14.5	47	380	193	0.65
T4DT135H	27 ~ 135	3 ~	0.1	N·m	I	12.7	31.0	30.5	14.5	47	380	193	0.66
T4DT200H	40 ~ 200	5 ~	0.1	N·m	II	12.7	41.0	34.5	18.0	39	520	216	1.28
T4DT340H	68 ~ 340	5 ~	0.1	N·m	II	12.7	41.0	34.5	18.0	39	640	336	1.45
T6DT500H	100 ~ 500	5 ~	0.1	N·m	II	19.0	60.0	55.0	30.0	39	945	634	3.00
T6DT850H	170 ~ 850	5 ~	0.1	N·m	II	19.0	60.0	55.0	30.0	39	1220	910	4.18

Model	Accuracy	Battery	Battery Life (*3)	Operating Temperature	Storage Temperature	Humidity
T2DT30H T3DT60H T3DT85H T3DT135H T4DT135H	±3%	AAA Alkaline or Manganese	Continuous operation: 48 hrs (LED light Off) Standby: 6 months (LED light Off)	-10°C	-20°C	Less than 90%RH
T4DT200H T4DT340H T6DT500H T6DT850H	±3.5%	Nickel Metal Hydride Rechargeable Battery x2	Continuous operation: 110 hrs (LED light Off) Standby: 12 months (LED light Off)	60°C	70°C	

\*1:Selectable Unit: N.m (preset), in-lb, ft-lb, kg-cm  
 \*2:Exclude battery.  
 \*3:Battery life varies depending on conditions. Automatically shut off when the battery life is low.

Accessory	
Communications Software	1
USB Cord	1
AAA Alkaline(T2DT30H ~ T4DT135H)	2
AA Alkaline (T4DT200H ~ T6DT850H)	2
Calibration Certificate W/H Traceability	1
Instruction Manual	1
Plastic Case	1



## Expire Date of Calibration Certificate

- Not in Use  
1 year from the date on the Calibration Certificate
- Start to use less than a year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 10,000 tightening.

## Repair·Maintenance

- Repair and Maintenance required when LCD, LED lights or the gear teeth in ratchet head is broken.  
Repair work might be impossible depending on the broken condition.
- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul once a year or every 10,000 tightening.
- Contact your distributor for reissuing the calibration certificate.
- Contact your distributor for details of handling DIGITORQON.

## DIGITORQON HDT-SERIES

DIGITORQON HDH-series is a digital torque measurement device mounted between the manual handle, such as a ratchet handle, a spinner handle, etc., and the socket. 2 measurement modes (peak & tracking) available in both CW and CCW directions. Alert by beeping sound when reaching the target torque. Set the beepsound function arbitrarily between 50% and 95% of the target torque.



H3DT135



H4DT200



H3DT135  
(with ratchet handle and socket)



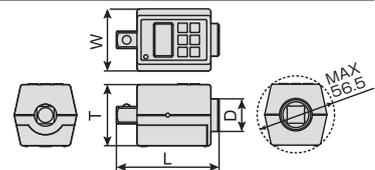
H4DT200  
(with ratchet handle and socket)

Model	Capacity Torque Range (N · m) Min. ~ Max.	Unit	Square Drive Male/Female (mm)	Dimensions (mm)				Weight (kg)	Case Size (mm)
				W	T	D	L		
H3DT135	10 ~ 135	N · m	9.5	45	45	24	75	0.194	130 × 107 × 53
H4DT200	20 ~ 200	N · m	12.7	45	45	24	75	0.184	

- \*Exclude battery.
- Repeated Accuracy: ±3% ● Battery: AAA Alkaline Battery × 2 ● Torque Readout (Unit: N · m)  
H3DT135: 0.01 increment (from 10.00 to 99.99 N · m), 0.1 increment (from 100.0 to 135.0 N · m)  
H4DT200: 0.01 increment (from 20.00 to 99.99 N · m), 0.1 increment (from 100.0 to 200.0 N · m)
- Loading Direction: Clockwise and Counter-Clockwise Direction
- Operating Temperature: 5°C ~ 42°C ● Storage Temperature: -20°C ~ 50°C

● Repeated Accuracy: ± 3%

Accessory	
Calibration Certificate W/H Traceability	1
Instruction Manual	1
Plastic Case	1
AAA Alkaline Battery	2



### Expire Date of Calibration Certificate

1. Not in Use  
1 year from the date on the Calibration Certificate
2. Start to use less than a year from the date on the Calibration Certificate.

### Repair · Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul once a year or every 10,000 tightening.
- Contact your distributor for reissuing the calibration certificate.

### CAUTION

- Do not input power to "DIGITORQON" by using power tools.

# DIGITORQON DBDT-SERIES

DIGITORQON DBDT-series is Digital Torque Screwdriver with bit changeable function. Over-Torque preventing function installed. Alert by beeping sound and Red LED when reaching the target torque.

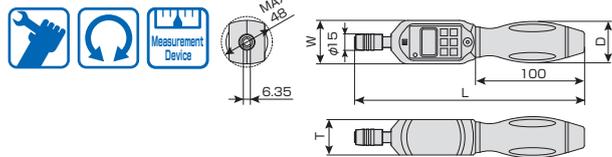
Set the over-torque preventing function arbitrarily between 50% and 95% of the target torque.



Model	Capacity Torque Range (cN · m) Min. ~ Max.	Unit	A/F of Bit (mm)	Battery	Operating Temperature	Storage Temperature	Dimensions (mm)				Weight (kg)	Case size (mm)
							W	T	D	L		
DBDT3S	30 ~ 300	cN · m	6.35	AAA Alkaline × 2	5 ~ 42°C	-20 ~ 50°C	40	32	38.5	212	0.15	W250 × D100 × H50
DBDT6S	60 ~ 600	cN · m	6.35				40	32	38.5	212	0.15	

\*The Unit on display of DBDT3 (cN · m) : 0.01 ubcrenebt between 30 and 99.99, 0.1 increment between 100.0 and 300.0  
 \*The Unit on display of DBDT6 (cN · m) : 0.01 ubcrenebt between 60 and 99.99, 0.1 increment between 100.0 and 600.0  
 \*The weight values exclude battery. \*Battery life varies depending on conditions.

Unit: cN · m	Accuracy: +/- 3%	Accessory
		Screwdriver Bit Set (BTM6S)
		Screwdriver Bit (+) BT-P1, P2, P3
		Screwdriver Bit (-) BT-M5.5, M6, M8
		Bit Holder BTB6
		Calibration Certificate W/H Traceability 1
		Instruction Manual 1
		Plastic Case 1
		AAA Alkaline Battery 2



## Expire Date of Calibration Certificate

1. Not in Use  
1 year from the date on the Calibration Certificate
2. Start to use less than a year from the date on the Calibration Certificate.

## Repair · Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul once a year or every 10,000 tightening.
- Contact your distributor for reissuing the calibration certificate.

**⚠ WARNING**  
 • Plastic handle is not for insulated. Do not use on live lines.

# Digital indication helps the accurate torque setting.



**The first in the industry!** Visible Indicator

Watch Video  
<http://youtu.be/YZi-bY7T3Vk>



- Preset type torque wrench.
- When reaching preset torque, the wrench makes a click sound as well as a light retroaction.
- Visible Indicator helps to reduce wrong torque setting.

Products

TMN • TM • TMNH • TMNR • TMWM

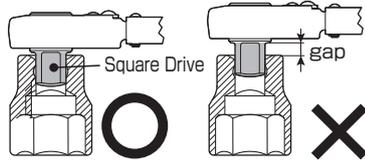
**T2MN6**

The color shows the size of square drive.

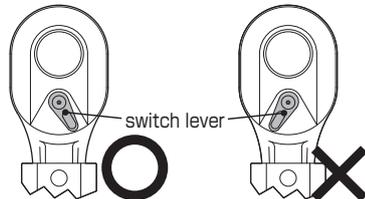


## Method of use

1. Insert square drive securely to the socket.



2. Confirm switch lever is located on the right as below chart.



3. Set up the targeted torque value.

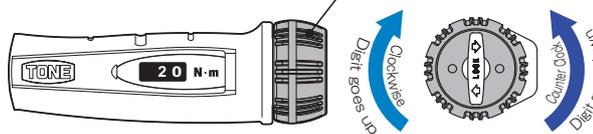
- Turn Locking Screw to the left-hand direction (counter-clockwise) to loosen. When screw hits pin, screw doesn't further move.



- Turn Torque Setting Knob to set target torque value. The digits in the window indicate setting torque.

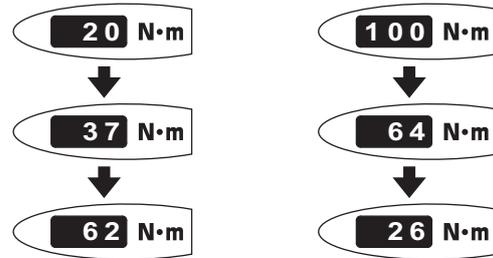


Torque Setting Knob

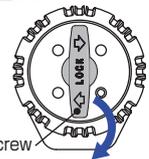


[Examples of torque setting using Model T4MN100]

- Setting up torque at 62N · m starting from actual reading of min. 20N · m. Turn Torque Setting Knob to the clockwise direction.
- Setting up torque at 100N · m starting from actual reading of max. 26N · m. Turn Torque Setting Knob to the counter-clockwise direction.

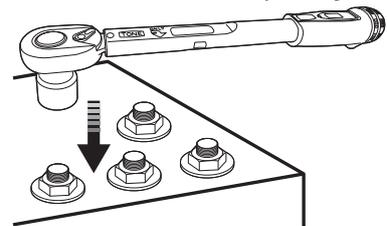


- Lock by turning Locking-screw to the right-hand direction. Now, setting up the torque is completed!

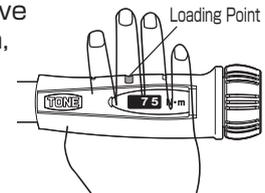


Now the torque setting is completed.

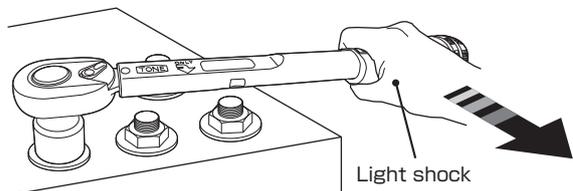
4. Apply socket to cover bolt/nut completely.



5. Apply the middle finger above loading point on the wrench, grip handle and pull to clockwise direction.



6. When setted torque value is reached, there is a clicking sound and light shock to the hand is felt. At this point, stop loading immediately to avoid over torque.



## TORQUE WRENCH, PRESET TYPE (DIGITAL READING)

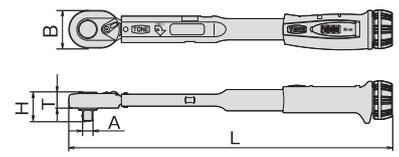
TORQUE WRENCH, PRESET TYPE (DIGITAL READING) is for tightening bolts/nuts. Prevents unintended alteration of setting torque owing to independent handle and setting knob. Prevents mistake in torque setting as torque value can be indicated in self explanatory digits. When reaching the preset torque, the wrench makes a click sound as well as light retroaction.



Model	Torque Range Min-Max (N.m)	Increments	Sq. Drive A (mm)	Dimensions (mm)				Weight (kg)	Case Size
				B	H	T	L		
T2MN6	1 ~ 6	0.1	6.35	24.0	18.3	10.4	222	0.26	305×97×70
T2MN13	3 ~ 13	0.2	6.35	24.0	18.3	10.4	253	0.29	305×97×70
T3MN20	4 ~ 20	0.2	9.5	24.0	21.5	10.4	253	0.30	305×97×70
T3MN50	10 ~ 50	0.5	9.5	36.0	26.4	14.0	308	0.52	355×97×70
T4MN50	10 ~ 50	0.5	12.7	36.0	30.4	14.0	308	0.55	355×97×70
T3MN100	20 ~ 100	1	9.5	36.0	26.4	14.0	387	0.75	505×97×70
T4MN100	20 ~ 100	1	12.7	36.0	30.4	14.0	387	0.77	505×97×70
T4MN140	30 ~ 140	1	12.7	36.0	30.4	14.0	450	0.82	505×97×70
T4MN200	40 ~ 200	2	12.7	45.2	34.0	17.8	526	1.40	765×97×70
<b>NEW</b> T4MN300	60 ~ 300	2	12.7	45.2	34.0	17.8	716	1.88	765×97×70
T6MN300	60 ~ 300	2	19.0	45.2	41.5	17.8	716	1.89	765×97×70

- Repeated Accuracy: ± 3%
- Load direction: to right (clockwise) direction only.

Accessory	
Calibration Certificate W/H Traceability	1
Instruction Manual	1
Plastic Case	1



### Expire Date of Calibration Certificate

1. Not in Use  
2 year from the date on the Calibration Certificate
2. Start to use less than 2 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

### Repair·Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Contact your distributor for reissuing the calibration certificate.
- Carry out overhaul in case the wrench doesn't sound click or shock.

# TORQUE WRENCH, PRESET TYPE (DIGITAL READING WITH SOCKET HOLD)

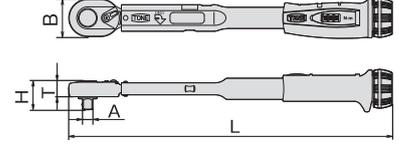
TORQUE WRENCH, PRESET TYPE (DIGITAL READING WITH SOCKET HOLD) is for tightening bolts/nuts. Prevents unintended alteration of setting torque owing to independent handle and setting knob. Prevents mistake in torque setting as torque value can be indicated in self explanatory digits. (system is mechanical, not electrical)  
 When reaching the preset torque, the wrench makes a click sound as well as light retroaction. Socket Hold Mechanism is installed.  
 Hold socket tightly but easy to exchange.



Model	Capacity Torque Range (N · m) Min. ~ Max.	Increments	Unit	Sq. Drive A (mm)	Dimensions (mm)				Weight (kg)	Case Size
					B	H	T	L		
T3MN20H	4 ~ 20	0.2	N · m	9.5	24.0	21.4	10.4	253	0.30	355 × 97 × 75
T3MN50H	10 ~ 50	0.5	N · m	9.5	36.0	26.3	10.4	303	0.52	355 × 97 × 75
T4MN50H	10 ~ 50	0.5	N · m	12.7	36.0	30.0	14.0	303	0.55	355 × 97 × 75
T3MN100H	20 ~ 100	1	N · m	9.5	36.0	26.3	10.4	387	0.75	505 × 97 × 75
T4MN100H	20 ~ 100	1	N · m	12.7	36.0	30.0	14.0	387	0.77	505 × 97 × 75
T4MN140H	30 ~ 140	1	N · m	12.7	36.0	30.0	14.0	450	0.82	505 × 97 × 75
T4MN200H	40 ~ 200	2	N · m	12.7	45.2	34.0	17.8	526	1.33	765 × 97 × 75
<b>NEW</b> T4MN300H	60 ~ 300	2	N · m	12.7	45.2	34.0	17.8	716	1.84	765 × 97 × 75
T6MN300H	60 ~ 300	2	N · m	19.0	45.2	40.5	17.8	716	1.85	765 × 97 × 75

- Socket Hold Mechanism
- Repeated Accuracy: ± 3%
- Load direction: to right (clockwise) direction only.

Accessory	
Calibration Certificate W/H Traceability	1
Instruction Manual	1
Plastic Case	1



**Socket Hold Mechanism**

\* Make sure to press the push button when install/remove the socket.

## Expire Date of Calibration Certificate

1. Not in Use  
2 year from the date on the Calibration Certificate
2. Start to use less than 2 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

## Repair·Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Contact your distributor for reissuing the calibration certificate.
- Carry out overhaul in case the wrench doesn't sound click or shock.

### CAUTION

- If the ball groove of sq. drive of socket or accessory is different from standard, holding mechanism often does not work.
- Strong shock often causes malfunction of holding mechanism.

## TORQUE WRENCH, PRESET TYPE

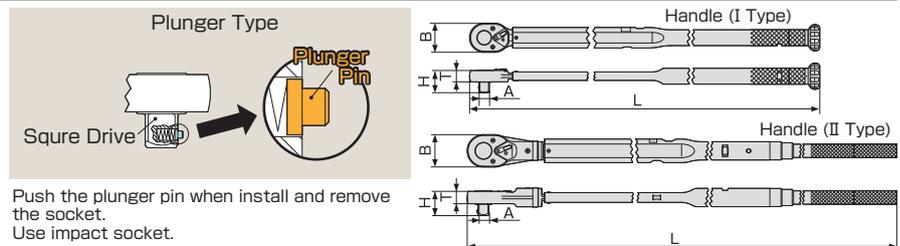
TORQUE WRENCH, PRESET TYPE is for tightening bolts/nuts. When reaching the preset torque, the wrench makes a click sound as well as light retroaction.



Model	Capacity Torque Range (N · m) Min. ~ Max.	Increments	Unit	Handle Type	Sq. Drive A (mm)	Dimensions (mm)				Weight (kg)	Case Size
						B	H	T	L		
T6L420N	60 ~ 420	2	N · m	I	19.0	54	42.7	21.0	950	3.3	1,050 × 105 × 80
T6L700N	100 ~ 700	5	N · m	II	19.0	68	49.5	27.5	1314	6.2	1,200 × 180 × 98
T8L850N	100 ~ 850	5	N · m	II	25.4	76	58.0	29.0	1388	8.5	1,200 × 180 × 98
T8L1000N	100 ~ 1,000	5	N · m	II	25.4	76	58.0	29.0	1538	8.8	1,200 × 180 × 98
T8L1400N	200 ~ 1,400	10	N · m	II	25.4	87	61.0	32.5	1844	14.0	1,200 × 180 × 98
T8L2100N	700 ~ 2,100	10	N · m	II	25.4	87	61.0	32.5	2064	19.5	1,770 × 176 × 90

\*T8L850N ~ T8L2100N is plunger type.

- Repeated Accuracy: ± 3%
- Load direction: to right (clockwise) direction only.



### Accessory (1 pc each)

	T6L420N	T6L700N	T8L850N	T8L1000N	T8L1400N	T8L2100N
Extension Handle	—	○	○	○	○	○
Box Wrench	—	8mm	8mm	8mm	10mm	10mm
Calibration Certificate W/H Traceability	○	○	○	○	○	○
Instruction Manual	○	○	○	○	○	○
Metal Case	○	○	○	○	○	—

\*T8L2100N is Carton box case

### Expire Date of Calibration Certificate

1. Not in Use  
2 year from the date on the Calibration Certificate
2. Start to use less than 2 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

### Repair • Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Contact your distributor for reissuing the calibration certificate.
- Carry out overhaul in case the wrench doesn't sound click or shock.

**TORQUE WRENCH, PRESET TYPE (DIGITAL READING FOR BOTH OF R&L HAND THREADS)**

TORQUE WRENCH, PRESET TYPE (DIGITAL READING FOR BOTH OF R&L HAND THREADS) is for tightening bolts/nuts.

When reaching preset torque, the wrench makes a click sound as well as a light retroaction.

Need to flip the wrench when used for left handed screw.



Model	Capacity Torque Range (N · m) Min. ~ Max.	Increments	Unit	Sq. Drive A (mm)	Dimensions (mm)				Weight (kg)	Case Size
					B	H	T	L		
T4MN100R	20 ~ 100	1	N · m	12.7	36.0	49.2	14.0	387	0.83	480 × 78 × 49
T4MN140R	30 ~ 140	1	N · m	12.7	36.0	49.2	14.0	450	0.88	480 × 78 × 49
T4MN200R	40 ~ 200	2	N · m	12.7	45.2	52.7	20.5	526	1.42	625 × 78 × 59
T6MN300R	60 ~ 300	2	N · m	19.0	45.2	65.2	20.5	716	1.96	795 × 105 × 80

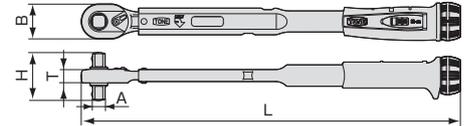
• Repeated Accuracy: ± 3%

**Accessory**

Calibration Certificate W/H Traceability	1
Instruction Manual	1
Plastic Case	1



\*Blow case for T4MN100R, T4MN140R and T4MN200R.  
Metal case for T6MN300R.



**Expiry Date of Calibration Certificate**

- Not in Use  
1 year from the date on the Calibration Certificate
- Start to use less than 1 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

**Repair · Maintenance**

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly.  
Contact your distributor periodically to keep the accuracy of the tools.
- Contact your distributor for details of handling the torque wrench.

## TORQUE WRENCH, PRESET TYPE (FOR BOTH OF R&L HAND THREADS)

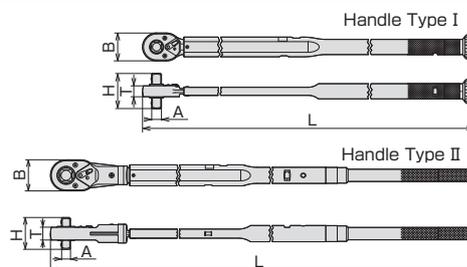
TORQUE WRENCH, PRESET TYPE (FOR BOTH OF R&L HAND THREADS) is for tightening bolts/nuts. When reaching preset torque, the wrench makes a click sound as well as a light retroaction. Need to flip the wrench when used for left handed screw.



Model	Capacity Torque Range (N · m) Min. ~ Max.	Increments	Unit	Handle Type	Sq. Drive A (mm)	Dimensions(mm)				Weight (kg)	Case Size
						B	H	T	L		
T6L420NR	60 ~ 420	2	N·m	I	19.0	54	69.2	21.0	950	3.4	1050 × 105 × 80
T6L700NR	100 ~ 700	5	N·m	II	19.0	68	69.5	27.5	1,314	6.3	1200 × 180 × 98
T6L850NR	100 ~ 850	5	N·m	II	19.0	76	75.0	29.0	1,388	8.6	1200 × 180 × 98
T8L850NR	100 ~ 850	5	N·m	II	25.4	76	85.0	29.0	1,538	8.9	1200 × 180 × 98

• Repeated Accuracy: ± 3%

Accessory	
Calibration Certificate W/H Traceability	1
Instruction Manual	1
Metal Case	1



### Expiry Date of Calibration Certificate

- Not in Use  
1 year from the date on the Calibration Certificate
- Start to use less than 1 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

### Repair·Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul in case the wrench doesn't sound click or shock.

## TORQUE WRENCH, PRESET TYPE (DIGITAL READING)

TORQUE WRENCH, PRESET TYPE (DIGITAL READING) is for tightening bolts/nuts. Visible Indicator helps to reduce wrong torque setting. When reaching preset torque, the wrench makes a click sound as well as a light retroaction. Used best in assembly line where required constant torque value.



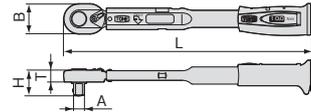
Digital Display



Model	Capacity Torque Range (N · m) Min. ~ Max.	Increments	Unit	Sq. Drive A (mm)	Dimensions (mm)				Weight (kg)	Case Size
					B	H	T	L		
T2M6	1 ~ 6	0.1	N · m	6.35	24.0	18.3	10.4	211	0.20	305 × 97 × 70
T2M13	3 ~ 13	0.2	N · m	6.35	24.0	18.3	10.4	240	0.25	305 × 97 × 70
T3M20	4 ~ 20	0.2	N · m	9.5	24.0	21.6	10.4	240	0.26	305 × 97 × 70
T3M50	10 ~ 50	0.5	N · m	9.5	36.0	26.4	14.0	291	0.50	355 × 97 × 70
T4M50	10 ~ 50	0.5	N · m	12.7	36.0	30.4	14.0	291	0.68	355 × 97 × 70
T3M100	20 ~ 100	1	N · m	9.5	36.0	26.4	14.0	369	0.51	505 × 97 × 70
T4M100	20 ~ 100	1	N · m	12.7	36.0	30.4	14.0	369	0.69	505 × 97 × 70
T4M140	30 ~ 140	1	N · m	12.7	36.0	30.4	14.0	432	0.81	505 × 97 × 70
T4M200	40 ~ 200	2	N · m	12.7	45.2	34.0	17.8	505	1.40	765 × 97 × 70
T6M300	60 ~ 300	2	N · m	19	45.2	40.5	17.8	696	1.87	765 × 97 × 70

• Repeated Accuracy: ± 3%  
\*Hex key (A/F 5mm) is required to set torque.

Accessory	
Tool for torque setting	1
Calibration Certificate W/H Traceability	1
Instruction Manual	1
Plastic Case	1



### Expiry Date of Calibration Certificate

- Not in Use  
2 year from the date on the Calibration Certificate
- Start to use less than 2 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

### Repair · Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly. Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul in case the wrench doesn't sound click or shock.

### CAUTION

- If the ball groove of sq.drive of socket of accessory is different from standerd, holding mechanism often does not work.
- Strong shock often causes malfunction of holding mechanism.

# TORQUE WRENCH, SINGLE PURPOSE TYPE

TORQUE WRENCH, PRESET TYPE (TORQUE WRENCH, SINGLE PURPOSE TYPE) is for tightening bolts/nuts.

This torque wrench is setted in requested torque value.

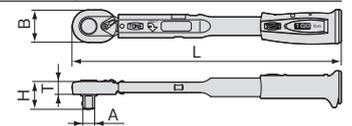
When reaching preset torque, the wrench makes a click sound as well as a light retroaction.



Model	Capacity Torque Range (N · m) Min. ~ Max.	Unit	Sq. Drive A (mm)	Dimensions (mm)				Weight (kg)	Case Size
				B	H	T	L		
T2MP6	1 ~ 6	N · m	6.35	24.0	18.3	10.4	211	0.19	305 × 97 × 70
T2MP13	3 ~ 13	N · m	6.35	24.0	18.3	10.4	240	0.24	305 × 97 × 70
T3MP20	4 ~ 20	N · m	9.5	24.0	21.6	10.4	240	0.25	305 × 97 × 70
T3MP50	10 ~ 50	N · m	9.5	36.0	26.4	14.0	291	0.49	355 × 97 × 70
T4MP50	10 ~ 50	N · m	12.7	36.0	30.4	14.0	291	0.50	355 × 97 × 70
T3MP100	20 ~ 100	N · m	9.5	36.0	26.4	14.0	369	0.67	505 × 97 × 70
T4MP100	20 ~ 100	N · m	12.7	36.0	30.4	14.0	369	0.68	505 × 97 × 70
T4MP140	30 ~ 140	N · m	12.7	36.0	30.4	14.0	432	0.80	505 × 97 × 70
T4MP200	40 ~ 200	N · m	12.7	45.2	34.0	17.8	505	1.39	765 × 97 × 70
T4MP300	60 ~ 300	N · m	12.7	45.2	34.0	17.8	696	1.82	765 × 97 × 70
T6MP300	60 ~ 300	N · m	19.0	45.2	40.5	17.8	696	1.86	765 × 97 × 70

• Repeated Accuracy: ± 3%

Accessory	
Tool for torque setting	1
Instruction Manual	1
Plastic Case	1



## How to Order Toque Setting

Please provide **serial number** and **setting torque** when placing your order.

**serial number**  
T4MP100 in **setting torque**  
100N·m

- CAUTION**
1. Be sure to provide torque unit.
  2. Note that 3 business days is required to set the torque.
  3. Calibration certificate is provided when torque setting is conducted by TONE.

## Expiry Date of Calibration Cartificate

1. Not in Use  
1 year from the date on the Calibration Certificate
2. Start to use less than 1 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

## Repair·Maintenance

- Be sure to provide the torque value when you require repair and maintenance service, as well as reissuing calibration certificate.
  - Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly.
- Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul in case the wrench doesn't sound click or shock.

## TORQUE WRENCH, PRESET OPEN END SPANNER

TORQUE WRENCH, PRESET OPEN END SPANNER is specialized for tightening flare joints/nut on air conditioner units.

The torque value is setted by TONE for flare joints/nuts. (Cannot be changed.)

When reaching preset torque, the wrench makes a clicking sound as well as a light retroaction.

Used for new refrigerant device



Model	Capacity Torque (N · m)	Dimensions(mm)				Weight (kg)
		D	S	T	L	
TSP16-17	16	36.5	17	7.6	220	0.37
TSP38-22	38	46.5	22	8.5	230	0.41
TSP55-26	55	55.0	26	9.7	286	0.54
TSP75-29	75	62.0	29	9.7	292	0.57

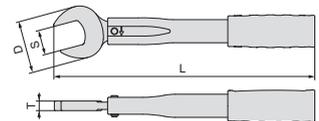
• Repeated Accuracy: ± 4%

Accessory

Calibration Certificate W/H Traceability	1
Instruction Manual	1



\*Need to flip the wrench when using for left handed screw. (Refer to instruction manual)  
Standard Tightening Torque Value for New Refrigerant Devices (Reference)



### Standard Tightening Torque Value for flare nut

Model	Size	Flare Size	Standard Tightening Torque Value
TSP16-17	6.35mm (1/4")	17mm	16N · m
TSP38-22	9.5mm (3/8")	22mm	38N · m
TSP55-26	12.7mm (1/2")	26mm *	55N · m
TSP75-29	15.9mm (5/8")	29mm *	75N · m

\*Changed according to New Refrigerent

### Expiry Date of Calibration Certificate

- Not in Use  
1 year from the date on the Calibration Certificate
- Start to use less than 1 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

### Repair · Maintenance

Contact your distributor periodically to keep the accuracy of the tools.

**TORQUE WRENCH, ADJUSTABLE WRENCH TYPE (TORQUE WRENCH, PRESET OPEN END SPANNER)**

TONE has specially developed the adjustable wrenches which maintains the torque accuracy regardless of bolt sizes.

The head of adjustable wrench adopt backrush-less mechanism to fix the bolt/nut firmly.

Visible Indicator helps to reduce wrong torque setting.

Multipule uses in various field, such as for plumbing of air conditioner, automobile and motor-bike, communicaiton devices or anchor bolt etc.

Regardless of measurement system, these wrenches are adjustable to any type of bolts/nuts.



Digital Display



TMWM25W

TMWM100

TMWM150

TMWM150W

Model	Capacity Torque Range (N·m) Min. ~ Max.	Increments	Unit	Dimensions(mm)				Weight (kg)	Case Size
				D	S	T	L		
TMWM15	3 ~ 15	0.2	N·m	49.3	10 ~ 27	9.9	289	0.32	355 × 117 × 70
TMWM25	5 ~ 25	0.2	N·m	49.3	10 ~ 27	9.9	330	0.46	355 × 117 × 70
*1 TMWM25W	5 ~ 25	0.2	N·m	66.8	17 ~ 38	13.3	346	0.55	355 × 117 × 70
TMWM50	10 ~ 50	0.5	N·m	49.3	10 ~ 27	9.9	330	0.46	355 × 117 × 70
*1 TMWM50W	10 ~ 50	0.5	N·m	66.8	17 ~ 38	13.3	346	0.55	355 × 117 × 70
TMWM60	15 ~ 60	0.5	N·m	49.3	10 ~ 27	9.9	330	0.46	355 × 117 × 70
TMWM100	20 ~ 100	1	N·m	66.8	17 ~ 38	13.3	420	0.74	545 × 132 × 70
*1 TMWM100W	20 ~ 100	1	N·m	83.3	27 ~ 48	16.0	438	0.92	545 × 132 × 70
TMWM115	25 ~ 115	1	N·m	66.8	17 ~ 38	13.3	420	0.74	545 × 132 × 70
TMWM150	50 ~ 150	1	N·m	66.8	17 ~ 38	13.3	483	0.82	545 × 132 × 70
*1 TMWM150W	50 ~ 150	1	N·m	83.3	27 ~ 48	16.0	500	1.00	545 × 132 × 70
TMWM200	40 ~ 200	2	N·m	83.3	27 ~ 48	16.0	570	1.51	618 × 130 × 70

\*1 Model having suffix "W" are wider jaws-opening type.

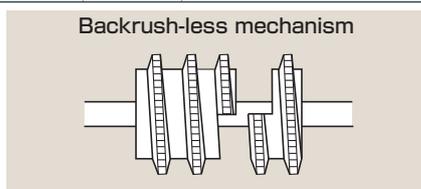
\*2 "TMWM60" and "TMWM115" are enabled model for new refrigerant device.

• Repeated Accuracy: ± 4% (± 7% for wider jaws-opening type.)

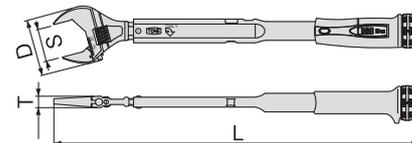
Accessory	
Calibration Certificate W/H Traceability	1
Instruction Manual	1
Plastic Case	1



\*Need to flip the wrench when using for left handed screw. (Refer to instruction manual)



Divided worms catch the rack on lower jaw firmly. This mechanism enables not to loosen the wrench.



**Standard Tightening Torque Value for flare nut**

Model Size	Flare Size	Standard Tightening Torque Value
6.35mm (1/4")	17mm	16N·m
9.5mm (3/8")	22mm	38N·m
12.7mm (1/2")	26mm *	55N·m
15.9mm (5/8")	29mm *	75N·m
19.0mm (3/4")	36mm	110N·m

\* Changed according to New Refrigerent

**Expiry Date of Calibration Certificate**

1. Not in Use  
2 year from the date on the Calibration Certificate
2. Start to use less than 2 year from the date on the Calibration Certificate.  
1 year from the first day of use or up to 100,000 tightening.

**Repair·Maintenance**

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly.  
Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul in case the wrench doesn't sound click or shock.

# TORQUE WRENCH CHECKER

Check at anytime the actual torque value before using torque wrench in the field.  
 Visible LED Display prevents mistake in reading the torque value.  
 3 measurement mode are installed (Peek mode/Track mode/Peek hold mode)  
 Available for various size and head of the wrench by using Adaptors.



Watch Video  
<http://youtu.be/sp-iRroH2FM>



TTC-60



TTC-500



TTC-1000



Conversion Adaptor Convex Hexiagon Adaptor



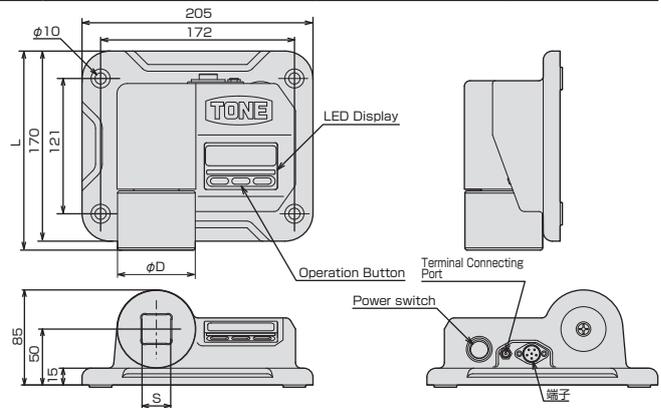
Model	Torque Range Min. ~ Max. (N.m)	Increments	Sq. Drive (mm)	Dimensions(mm)			Measurement	Accuracy	Weight (Main Body Only)
				S	D	L			
TTC-60	2 ~ 60	0.00 ~	0.01	12.7	30.0	155	CW	± 1 % + 1 digit	2.2
TTC-500	20 ~ 500	0.0 ~	0.1	25.4	48.0	173			2.6
TTC-1000	50 ~ 1000	0.0 ~	0.1	25.4	48.0	173			2.8

- Voltage : 100V ~ 240V
- Operating temperature : 5°C ~ 40°C
- Storage temperature : -20°C ~ 70°C
- Measurement Mode: Peek mode/Track mode/Peek hold mode



### Accessory

- Conversion Adaptor (1pc each)  
 TTC-60 : □ 6.35mm × 凸 12.7mm, □ 9.5mm × 凸 12.7mm  
 TTC-500, TTC-1000 : □ 9.5mm × 凸 25.4mm, □ 12.7mm × 凸 25.4mm,  
 □ 19.0mm × 凸 25.4mm
- Convex Hexiagon Adaptor (1pc each)  
 TTC-60 : 凸 19mm × 凸 12.7mm, 凸 27mm × 凸 12.7mm  
 TTC-500, TTC-1000 : 凸 27mm × 凸 25.4mm, 凸 38mm × 凸 25.4mm
- AC adaptor 100V ~ 240V/50-60Hz
- Fixing Bolt : M10 × 40 Cap Bolt (with Washer, Nut) 4
- Instruction Manual ○ Calibration Certificate W/H Traceability



## Repair · Maintenance

- Accuracy might become inaccurate in case that the tools are not in use for a long time or are not use properly.  
 Contact your distributor periodically to keep the accuracy of the tools.
- Carry out overhaul in case the wrench doesn't sound click or shock.

### LED Display

- Visuable readout with LED Display.

### High Accuracy

- Accuracy: ±1% + 1 digit

### Easy Operation

- Easy to operate by power switch and three buttons.

### 3modes are available for various toque management.

#### Track Mode

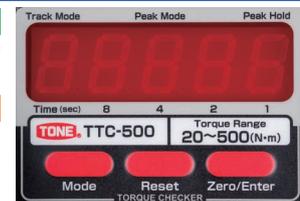
Displayed torque value changes in accordance with the applying torque. The display indicates '0' when stopped applying torque.

#### Peak Mode

The tool resets automatically as the seconds setted in advance. (Can be choosen from 1,2,4 and 8 sec.)

#### Peak Hold

Displayed torque value remains until pushed the botton.



# TORQUE WRENCH TESTING MACHINE

Used in  
TONE  
Factory

User-Friendly TORQUE WRENCH TESTING MACHINE available from TONE.  
Totally simple operations based on JIS B 4652.

\*JIS B 4652 : Hand torque tools -Requirements and test methods



Computer with connection cable



TORQUE WRENCH

TORQUE WRENCH CHECKER / TORQUE WRENCH TESTING MACHINE

Model	CH	Torque Range Min. ~ Max. (N.m)	Increments (N·m)	Sq. Drive (mm)	Mesurement	Accuracy (%)	Weight (kg)
ATT2100	1	1 ~ 50	0.001	12.7	CW CWW	± 1	750
	2	20 ~ 500	0.01	25.4			
	3	200 ~ 2100	0.1	38.1			

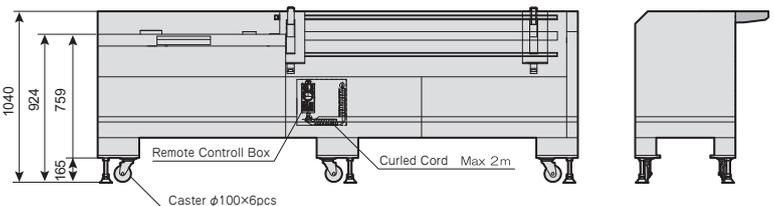
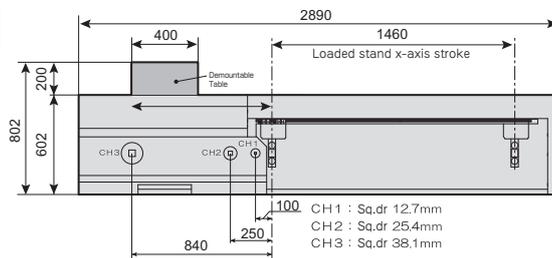
- Voltage : three-phase 200V, 30A
- Operating temperature : 18°C ~ 28°C
- Operating humidity : 50% RH ± 20%



### Accessory

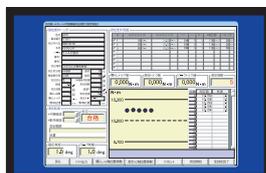
- Table
- Reaction bar for offset
- Hex socket head cap bolt M12 × 35 (6pcs)
- Computer with connection cable (software is installed)
- Monitor (liquid crystal), mouse, key board
- Cable 9pin (4m)
- Square Drive convert adaptor for measurement channel (each 1 unit)
- CH1 : □ 6.35 mm × 凸 12.7 mm , □ 9.5 mm × 凸 12.7 mm
- CH2 : □ 9.5 mm × 凸 25.4 mm , □ 12.7 mm × 凸 25.4 mm , □ 19.05 mm × 凸 25.4 mm
- CH3 : □ 19.05 mm × 凸 38.1 mm , □ 25.4 mm × 凸 38.1 mm
- Instruction Manual / Calibration Certificate W/H Traceability

\*Printer is not mounted



### Automatic measurement & Judgement function mounting

- Registration possible (Model, accuracy, loaded location)
- Automatic Judgement according to the model
- Measurement data is conservable
- Calibration Certificate issuable (need a printer)



### High Accuracy and Durability

- Measurement points are configurable maximum 8 points
- Measurement is enable max. 50 times in one measurement point.  
\*Calibration Certificate shows up to 10 times in one measurement point.

### High Accuracy : Wide Range

- Accuracy : ±1%
- Torque measurement range : 1~2100 N·m

### Customization

- The machine can be customized the spec. as requested.



ISO 9001

ISO 14001

# TONE CO., LTD.



<http://www.tonetool.co.jp>

Overseas Department

1-57, MINATOMACHI 2-CHOME,  
NANIWA-KU, OSAKA  
556-0017, JAPAN  
TEL+81-6-6649-5984 FAX+81-6-6649-5985  
E-mail : overseas@tonetool.co.jp

