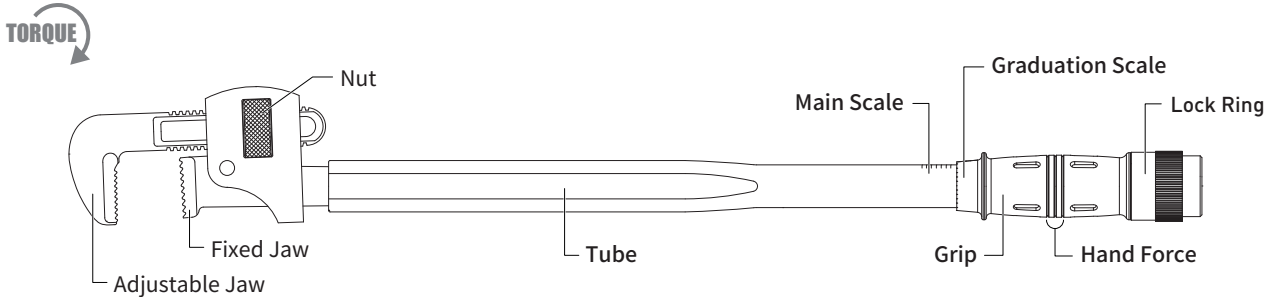


Adjustable Torque Wrench PIPE & CONSTRUCTION APPLICATIONS OPERATION MANUAL

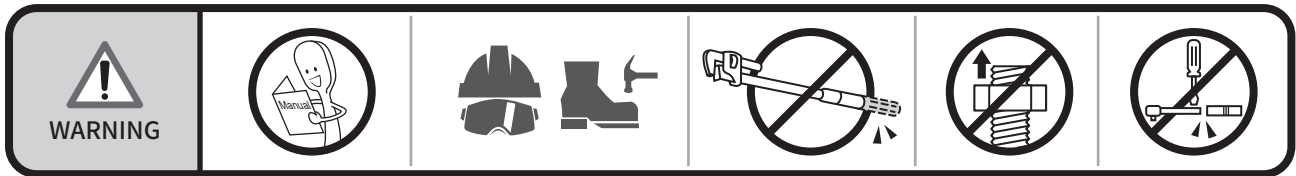
Models covered

PIT

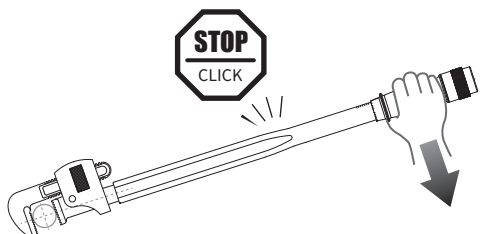
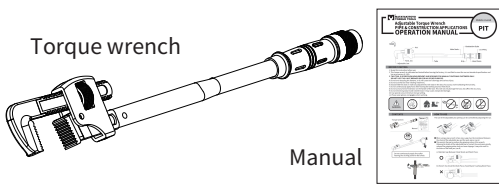


BEFORE STARTING

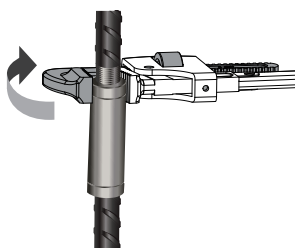
1. Study this instruction before use.
2. This torque wrench is calibrated and tested before leaving the factory, it is certified to meet the current standard specification and has an accuracy of $\pm 6\%$.
3. **THIS TOOL IS A PRECISION MEASUREMENT AND DESIGNED FOR MANUAL TIGHTENING FASTENERS ONLY. DO NOT USE IT AS A NUT BREAKER OR FOR ANY OTHER PURPOSE.**
4. Do not over torquing the fastener, or it will cause tool's damage and serious injury.
5. Do not use this tool near rotating machinery.
6. Disassemble this tool or make any adjustments will result in the loss of accuracy and invalidating the warranty.
7. Do not continuously apply force after hearing the clicking sound or feel shock.
8. Do not use any kind of extension on the handle of the tool. This will not only damage the tool, also affect the accuracy.
9. Do not immerse grease inside ratchet head. It may cause unexpected damage.
10. Use special care at minimum torque setting.
11. Please wear gloves and goggles when working.



CONTENTS

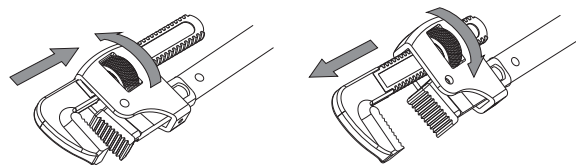


Do not continuously apply force after hearing the clicking sound or feel shock.



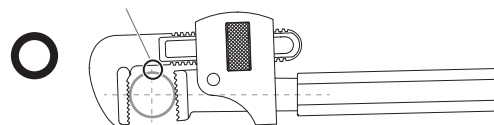
HOW TO USE

The size of the adjustable jaw opening can be controlled by adjusting the nut.

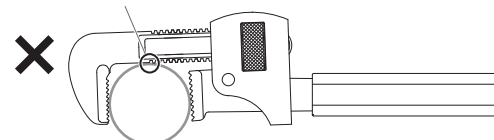


- When using a pipe wrench of any size, a gap must be maintained between the shank of the adjustable jaw and the work piece. (see A)
- This permits the jaw to produce the gripping action of the wrench. Allowing the shank of the adjustable jaw to contact the work piece greatly reduces the gripping action and can cause slippage. It may also result in the failure of the fixed jaw. (see B)

A. Maintain Gap Between Hook Shank and Work Piece.

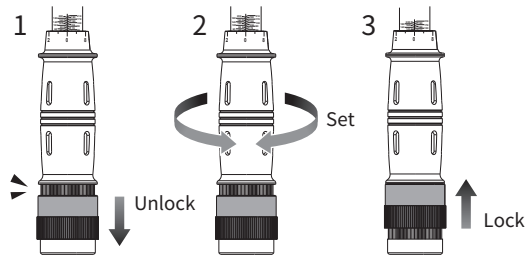


B. Wrench Too Small for Work Piece, Hook Shank Touching Work Piece.



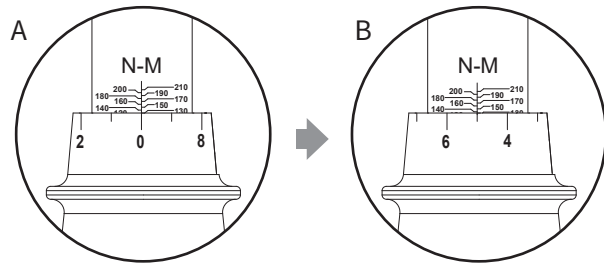
HOW TO SET TORQUE VALUE

1. Pull the lock ring to unlocked.
2. Turn the adjustable handle clockwise or counter-clockwise (Right or left) to set the desired torque.
3. Push the lock ring to set finished.



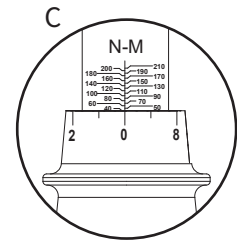
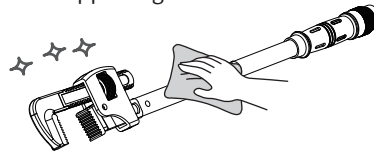
For example : ITEM NO. PIT-210N

To set torque to 135 Nm. Firstly pull the lock ring and turn the handle clockwise until the upper edge to 135 Nm (see A) and the reading "5" on the long tube must align with the center line of scale vertically so as to acquire 135 Nm. (see B)



MAINTENANCE AND STORAGE

1. Please return torque value to the lowest reading when not in use. (see C) Do not turn below the lowest reading.
2. If this tool has not been used for a period of time, it shall be preloaded several times at its maximum torque setting. This will allow internal lubricant to recoat.
3. Clean this tool by wiping with a clean cloth after operation and storage in a dry environment. Do not dip any type of liquid in this tool. This may damage the internal of this tool.
4. This tool should be recalibrated a period of 12 months, or 5,000 cycles, whichever occurs first. To contact with local vendor or an authorized repair center for supporting.



TORQUE CONVERSION FACTORS

| Units to be converted | Corresponding unit | | | | | | | | |
|-----------------------|--------------------|-------|--------|---------|---------|---------|--------|-----------------|---------------|
| | =mN-m | =cN-m | =N-m | =ozf-in | =lbf-in | =lbf-ft | =gf-cm | =kgf-cm (kp-cm) | =kgf-m (kp-m) |
| 1 mN-m | 1 | 0.1 | 0.001 | 0.142 | 0.009 | 0.0007 | 10.2 | 0.01 | 0.0001 |
| 1 cN-m | 10 | 1 | 0.01 | 1.416 | 0.088 | 0.007 | 102 | 0.102 | 0.001 |
| 1 N-m | 1000 | 100 | 1 | 141.6 | 8.851 | 0.738 | 10197 | 10.2 | 0.102 |
| 1 ozf-in | 7.062 | 0.706 | 0.007 | 1 | 0.0625 | 0.005 | 72 | 0.072 | 0.0007 |
| 1 lbf-in | 113 | 11.3 | 0.113 | 16 | 1 | 0.083 | 1152.1 | 1.152 | 0.0115 |
| 1 lbf-ft | 1356 | 135.6 | 1.356 | 192 | 12 | 1 | 13826 | 13.83 | 0.138 |
| 1 gf-cm | 0.098 | 0.01 | 0.0001 | 0.014 | 0.0009 | 0.00007 | 1 | 0.001 | 0.00001 |
| 1 kgf-cm(kp-cm) | 98.07 | 9.807 | 0.098 | 13.89 | 0.868 | 0.072 | 1000 | 1 | 0.01 |
| 1 kgf-m(kp-m) | 9807 | 980.7 | 0.9807 | 1389 | 86.8 | 0.7233 | 100000 | 100 | 1 |

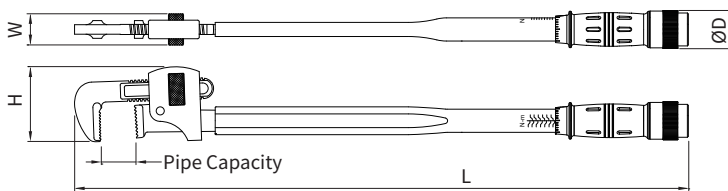
Conversion-formula :

Units to be converted × Factor = Corresponding unit

Example : Convert 5 lbf-ft into cN-m

Solution : 5 × 135.6 = 678 cN-m

SPECIFICATION



Metric

| ITEM NO. | Range | Icon | Pipe Capacity | H | W | L | ØD | KG |
|----------|------------|------|---------------|------|------|-----|------|------|
| PIT-210N | 40-210 Nm | Icon | 48 | 76.7 | 33.5 | 638 | 39.1 | 2.96 |
| PIT-350N | 70-350 Nm | Icon | 63 | 93.0 | 38.6 | 778 | 47.0 | 3.70 |
| PIT-500N | 100-500 Nm | Icon | 63 | 93.0 | 38.6 | 960 | 47.0 | 4.30 |

SAE

Accuracy : ± 6%

| ITEM NO. | Range | Icon | Pipe Capacity | H | W | L | ØD | KG |
|----------|--------------|------|---------------|------|------|-----|------|------|
| PIT-150F | 30-150 ft.lb | Icon | 48 | 76.7 | 33.5 | 638 | 39.1 | 2.96 |
| PIT-250F | 50-250 ft.lb | Icon | 63 | 93.0 | 38.6 | 778 | 47.0 | 3.70 |
| PIT-300F | 50-300 ft.lb | Icon | 63 | 93.0 | 38.6 | 960 | 47.0 | 4.30 |

Unit : mm

Version 03

Jun. 2023



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TORQUE TOOLS
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