T1-116:
Torque Driver Work Standard

Approved by:	Confirmed by:	Prepared by:
P. Bautista	L. Tan	A. Andres
PE Manager	PE SPV	PE PIC

Rev. 2.01

PRODUCTION DEPARTMENT

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① Purpose of “Torque Driver Work Standard”

Purpose

To define the **methods for maintenance** and **control of work using torque drivers** in product assembly processes and thereby achieve stable threaded fastener tightening quality.

② Definition of Terms

1. Compliance

The requirements mentioned under **Compliance items** shall be strictly followed to adhere to the standard. Ensure that such requirements will not be violated.

2. Torque driver

Torque drivers are tools shaped like screwdrivers used to tighten threaded fasteners to a prescribed torque and to measure the torque with which a threaded fastener is tightened. In this standard it refers to torque drivers that slip when the set torque is reached or signal types that do not slip.

3. Bit

Bits are parts mounted on the end of drivers.

4. Torque meter

Torque meters are devices that measure force applied to a shaft in a rotational direction (torque).

③ Torque driver work

3.1.Handling torque drivers

Compliance

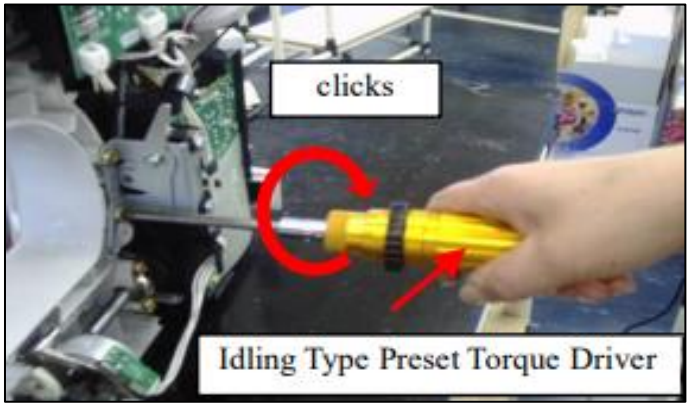
① Do not drop or apply excessive impact.

② Do not use for loosening threaded fasteners.

3.2.Tightening threaded fasteners

Compliance

1. Carefully align the tip of the bit with the groove.
2. The torque driver tightens the screw while pressed straight.
3. Stop tightening when the torque driver reaches the set torque and clicks
4. Use the torque driver to tighten at a speed able to achieve the correct torque value.

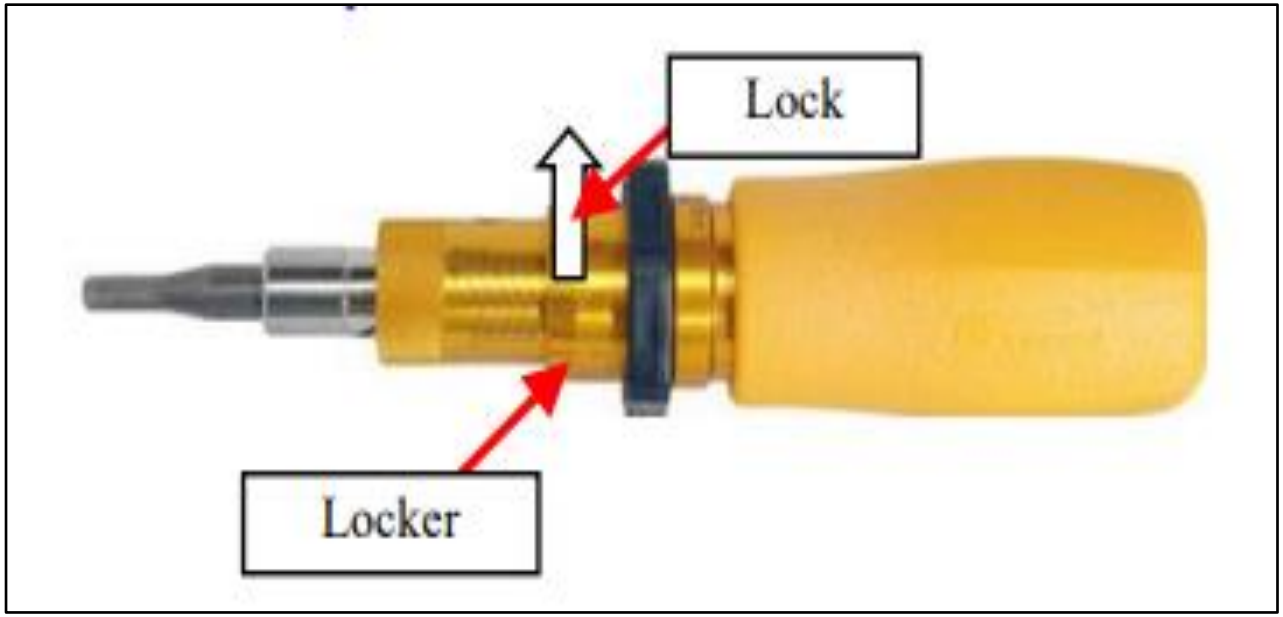


When the clicking sound occurs, you know the tightening torque is reached. After achieving set torque, turning the grip slips so that torque above the set value cannot be applied.

4.1.Torque driver management

Compliance ① Visually confirm the torque driver locker is locked before starting.

- Since it is possible for the set torque to change if the scaled part on the handle is touched, check that the locker of the torque driver is locked.



4.1.Torque driver management

Compliance ② Visually confirm that the bit tip shape has no cracks, chips, rusting or other abnormality before starting.

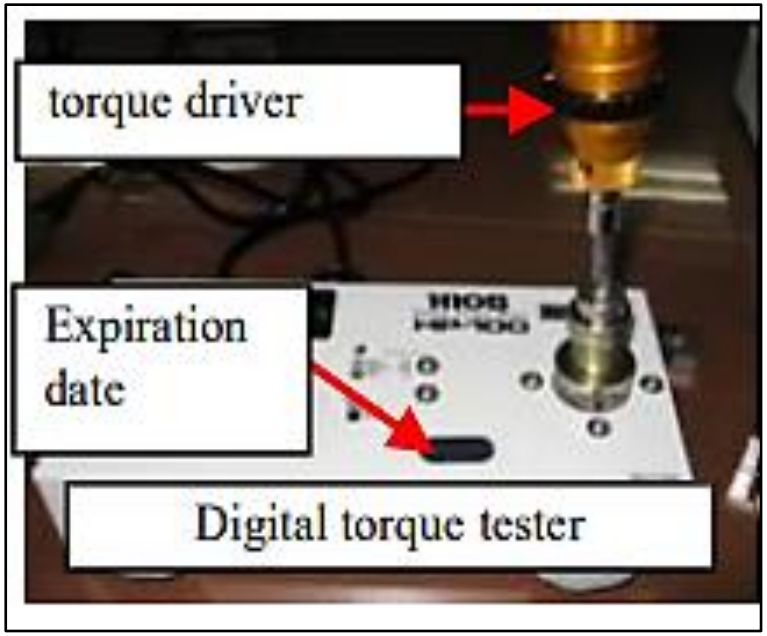
- When there is something abnormal with the bit tip, replace the bit. Abnormality from rust shall be handled according to the standards determined by the business area and location.

Compliance ③ Use magnetic tools so the threaded fastener sticks to the bit with magnetism and maintain required magnetic force.

4.2.Driver daily inspection

Compliance

Torque driver is measured using an instrument such as a digital torque tester at least once per month and recorded in the inspection record.



<Example torque driver inspection record format>

トルクドライバ点検記録表

管理No.　ライン名　部署名　年　月

① 点検サイクル　1,2は1回／日　3は1回／月　（使用前）
② 点検結果　1,2は○×で記入　3は数値で記入
③ 点検方法　1はロッカーがロックされていること
2はビット先端の欠け、削れが無い事
3はデジタルトルクテスターにてドライバーの締付トルクを測定
④ 異常処理　異常が発生した時は監督者に報告のこと

Ver. 1.00

承認	作成

月

No.	1	2		1	2		1	2	
点検項目	ロッカー	ビット		ロッカー	ビット		ロッカー	ビット	
点検器具	目視	目視		目視	目視		目視	目視	
規格	ロックされていること	ビット先端の欠け、削れが無いこと	担当者	ロックされていること	ビット先端の欠け、削れが無いこと	担当者	ロックされていること	ビット先端の欠け、削れが無いこと	担当者
1									
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No.	3	
点検項目	締付トルク	
点検器具	デジタルトルクテスタ	
規格	0.6±0.1 (0.5～0.7) N・m	担当者
月 日		
月 日		
月 日		

備考

4.3. Measure return torque

Measure return torque once per day and record the measured value in the inspection record.

- When the return torque value is set, use an instrument such as a directly read torque diver and input the results in the inspection record. See the manufacturer instruction manual for the measurement method. When production unit count is low, determine the measurement frequency in accordance with production count. Locations related to product safety discuss with the product safety department and determine measurement frequency through agreement.

4.4. Torque driver calibration

Follow Group regulation GR3301-03 Measurement Equipment Management Procedures.

Thank You!


brother
at your side