

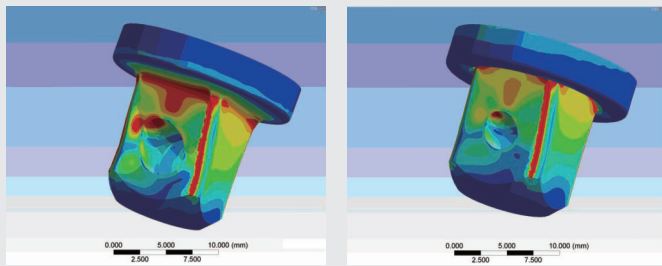
Features of TOHNICHI Torque Wrench

① High Accuracy

Our click type torque wrenches mostly maintain the accuracy of $\pm 3\%$. This accuracy rate exceeds ISO6789 standard. Also the digital torque wrench CEM3 series for inspection/measurement record $\pm 1\%$ of accuracy. Since the measuring range of dial type torque wrenches DB series is wider than ISO6789 Type I Class B, we calibrate our DB series by adding one more minimum torque point, which is less than 20%, to the other 4 points. Only the equipments that pass this strict test are shipped with calibration certificate. (Refer to technical data P.92-95)

② High Durability

Tohnichi guarantees accuracy and durability for the product within a hundred thousand cycles in use or one year use at the maximum torque value. Tohnichi click type torque wrench such as QL series is able to use up to around a million cycles (500,000 cycles for 550-1000N·m size, 250,000 cycles for over 1000N·m size click type torque wrench) if the tool is periodically calibrated and taken the necessary repairing every a hundred thousand cycles use (refer to technical data P.92).



Analyzing sq. drive with the former technology

Analyzing sq. drive with the "high durability & smaller size sq. drive technologies"

Small sq. drive with high durability

Applying various technologies such as FME (Finite Element Method), Tohnichi has succeeded to develop the smaller size square drive, interchangeable head, and torque wrench (applied to QL25N5-1/4, QL100N4-3/8, QL280N-1/2 and interchangeable heads QH series). This enables our torque wrench to use with the smaller size socket, so that eventually devotes to decrease the total weight of the tool, and leads to increase users' workability.



Durability test to ensure high durability

Tohnichi conducts durability testing when developing new products. Before manufacturing new products, we test durability as type certification test also when mass production, we conduct sampling test regularly to maintain our high level of durability.

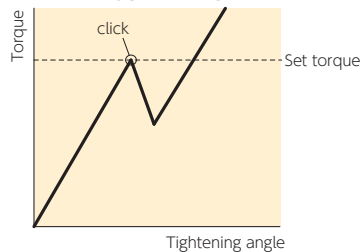
③ Guaranteed supply system

Torque wrenches for manufacturing are often registered with their specifications; therefore stable supply system in a long run is required. We do not only strive for maintaining a long-term and stable supply of our products, but also offer repair parts including tools for discontinued products with a limit of 6 years. Also we strengthen our agency network in overseas, supplying products and calibration/repair services for the customers around the world.

Tohnichi 4 types of torque wrenches for your ideal work

Characteristic of Signal Type Torque Wrench

Click Type Torque Wrench

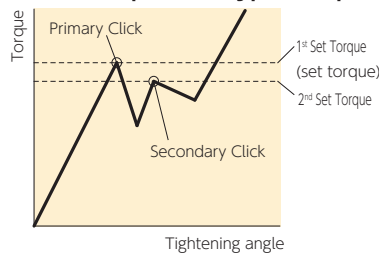


The most standard torque wrench. A clear 'click' sound signals tightening completion upon reaching the set torque. Once recognizing the clicking sound and feeling, stop to apply force and finish tightening to avoid over-torque.

A sample product of click type torque wrench



Two Step Click Type Torque Wrench

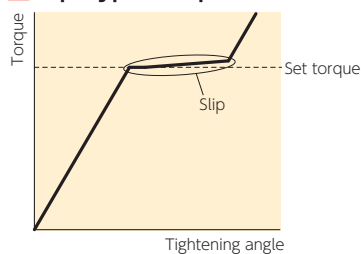


The primary 'click' sound signals reaching the 1st set torque and the secondary click signals tightening completion. Tightening after the 2nd click causes over-torque. Compared with the click type, Two-Step Click Type leaves wider margin after clicking and is more effective against over-torque.

A sample product of two step click type torque wrench



Slip Type Torque Wrench

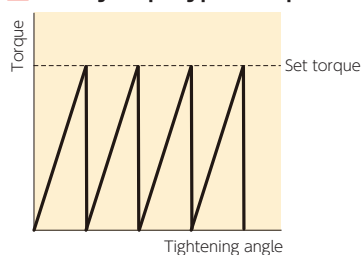


The head starts slipping upon reaching the set torque. The torque is almost stable until the head slips about 90 degrees angle. Tightening after that causes over-torque. Head slipping and bending alert users to stop pulling.

A sample product of slip type torque wrenches



Rotary Slip Type Torque Wrench



Cam-link mechanism generates a 45 degree slip and 'click' feeling upon reaching the set torque. Slip and click are repeatedly felt if tightening after reaching the set torque continues. Because users can tighten no further than the set torque, over-torque is completely prevented.

A sample product of air-slip type torque wrenches

