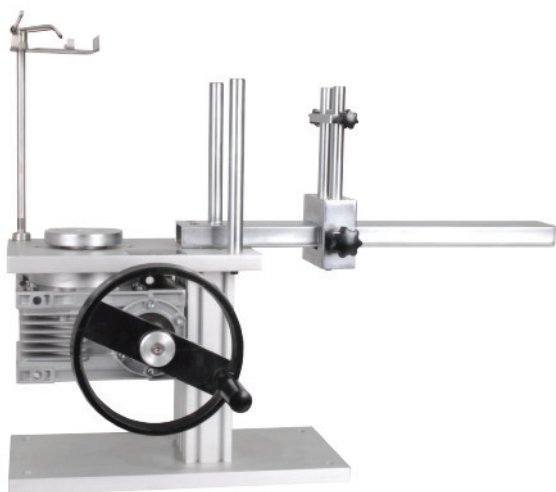




Torque Tester Loader

Manual Type



Different gear ratios design can work with different torque testers.

Test different length of torque wrenches within the maximum torque range.

Torque is applied smoothly and easily

Speed of torque application is easy to control

Part Code	Max Torque N.m	Arm Length Min(mm) Max(mm)	Length mm	Width mm	Height mm	Weight mm
TS1350	350	197 686	860	290	590	32.5
TS12000	2000	420 1690	2090	350	590	80

Torque Knowledge

1.What is torque?

Torque is a force applied to an object with a pivot point as to produce turning.

A torque can be thought of as a turning motion.

Torque is measured by multiplying the force by the perpendicular distance from the point where the force is applied to the pivot point.

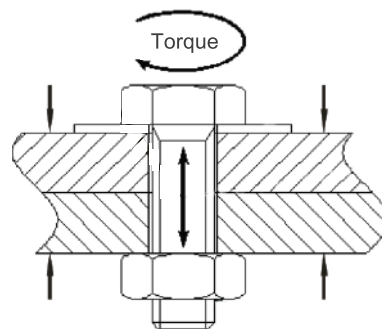
2.Torque Analysis in threaded fasteners

A bolt or other threaded fastener is used to clamp together two or more objects.

Torquing (tightening) the bolt stretches it thus producing clamping force.

If the clamping force is too large, the bolt can break or the objects can be deformed and/or broken.

If the clamping force is too small, the objects can shift, become separated or fall apart.



3.Torque Calculation Formula

Torque=Force applied x Arm of force

See attached picture,to reach required torque for different force applied,the distance need to be changed between forcepoint and bolts or nuts.

Defined as below:

T=torque

F=force applied

L=arm of force

For example A

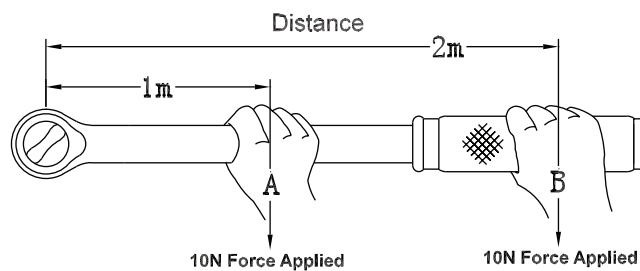
10N x 1M = 10N.m

For example B

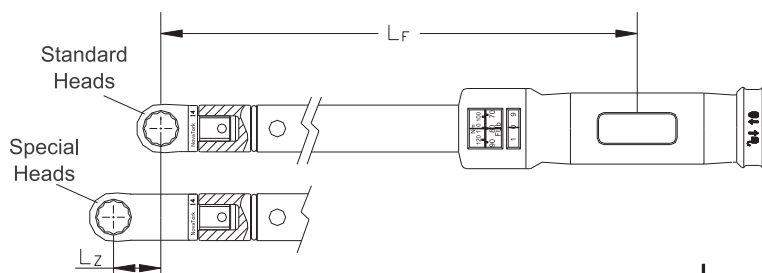
10N x 2M = 20N.m

Result:

T=FXL



4.Torque Calculation Formula For Special Heads



$$\text{Set Torque} = M \frac{L_F}{L_F + L_Z}$$

M - Applied Torque