

Torque meter calibration

Torque meter calibration has its particularities when compared to the calibration of a dynamometer.

The output signal being, by nature, proportional to the torque applied, it is only necessary to resort to a second or third order mathematical model when seeking to achieve great precision.

Torque applied is generally a pure torque when using an effective decoupling system. Therefore, calibration results are only usable for the measurement of a pure torque.

If the torque meter is used for dynamometer calibration or verification, calibration must either be:

- performed by applying a combination of moments and transversal forces equal to those applied by the wrench.
- completed by means of a specific test evidencing the insensitivity of the torque meter to these transversal efforts.

There is currently no international standard in place on torque meter calibration. However, a calibration guide has been issued by the European Metrology Association EURAMET under reference cg-14 / V.01 dated July 2007, available on the <http://www.euramet.org> website.

The ISO 6789 international standard establishes a calibration procedure for dynamometric wrenches.