

DynTORQ: Torque Wrench Calibration System

The dual range torque cell is connected directly to a precision volt meter by means of the cable connector located on top of the counter-top close to the dual range torque cell assembly. This direct connection is possible due to the fact that the torque sensor contains an instrumentation amplifier that provides the excitation voltage and the required gain to amplify the torque cell output voltage prior to the voltage being measured by the precision voltmeter.

The TCS is fully automated and is under control of the computer/controller. The TCS software allows the user to use the computer/controller to enter data about the wrench to be calibrated and to select the test to be performed. At the appropriate time, the software causes a selected amount of torque to be applied to the wrench. The computer display is used to provide a simple, informative interface with error-checking and informative error messages to help prevent damage.

TCS-1000: Automated Motor Controller / Actuator 1500 ft-lbs of Torque

HARDWARE	SPECIFICATION
Environmental	10 - 32 deg C, Up to 90% humidity, non-condensing
Power	120 VAC +/- 10%, 50/60Hz compatible Emergency shut-off switch
Range	Capable of testing snap, dial and beam type wrenches from 1 to 1500 ft-lb
Torque Sensors	Compatible with SensorData T171 series torque sensors, Variable speed motor to optimize snap detection using T171 series torque sensors
Mechanical	Includes torque multiplier mounting fixture Supports torque sensor calibration

SOFTWARE	SPECIFICATION
Configuration	Compatible with Agilent 3458A Compatible with CALSET 2000 ICE controller Compatible with SensorData T171 series torque sensors
Modes	Automatic snap, dial, beam Manual snap, dial, beam Operator selectable tolerance Peak-hold function for dial, beam wrenches

TB-1000 Enclosure: Heavy Duty Steel Bench / Calibration Stand

- Supports SensorData T171 series torque sensor calibration hardware to 1500 ft-lb
- Supports torque calibrator when in use from 1 to 1500 ft-lb
- Provides continuous work surface with TCS-1000
- Utilizes locking wheels to prevent movement when performing manual calibrations
- Supports up to 1500 ft-lb torque wrenches with an overall length of 80 inches