



Torque Wrench Calibrator (TWC) 400 N-m Manual

- Enables torque wrench calibration or testing in accordance with ISO 6789-2:2017 if used with T-Box™ 2
- Also in accordance with BS EN 26789:2003, ISO 6789-1:2017
- Counterbalance Reaction system is designed to support the weight of the wrench so that the weight does not become a parasitic force within the calibration system. The floating nature of the support means that the wrench is able to find its own natural level rather than being constrained as in many other loading devices. Any such constraint will be a parasitic force within the system (Patents apply)
- Lightweight alloy construction ensures the TWC is easily transported, making it well suited for mobile laboratory applications

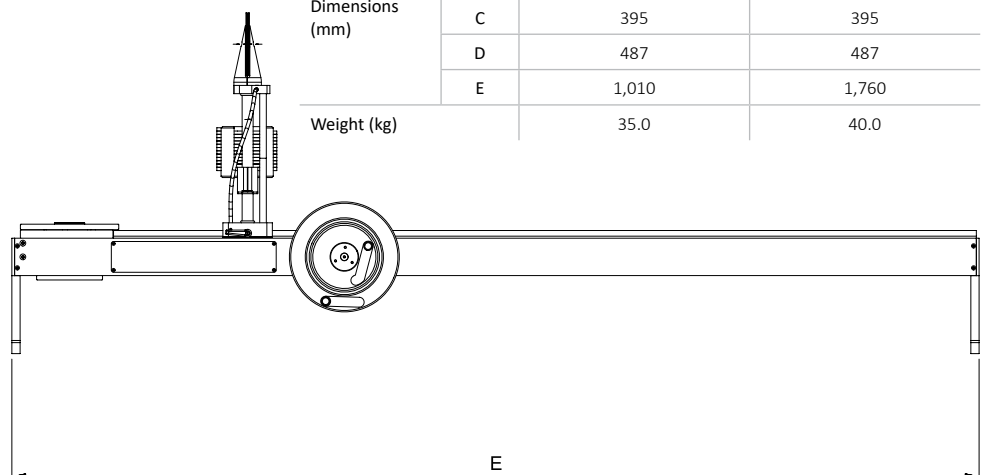
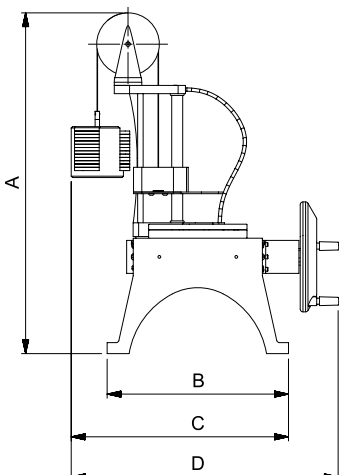
- Two speed gearbox designed for a sufficient balance of speed and control by allowing for both fast loading of the torque wrench and a slower more precise loading
- Works with Flange Mounted Transducers, Static Transducers (when using part number: 60318), T-Box™ 2, TST, TTT and Pro-Test (when using part number: 60323)
- During calibration the TWC maintains a fixed position on the handle of the torque wrench
- Rotating transducer design ensures that the load is applied 90° to the torque wrench handle. The benefit of this precise alignment is that forces are applied squarely to the load point of the handle
- Any Transducer must not be used below 5% of its capacity when used with TWC



Torque Wrench Calibrator (TWC) Manual shown with a Flange Mounted Transducer and a Model 100 torque wrench (not included)

4 TORQUE WRENCH CALIBRATOR (TWC)	
60331	Torque Wrench Calibrator 400 N-m Manual
60332	Torque Wrench Calibrator 1,500 N-m Manual

Model		TWC 400	TWC 1500
Part Number		60331	60332
Wrench Length (Torque Radius)	Min	135	135
	Max	750	1,500
Dimensions (mm)	A	620	620
	B	330	330
	C	395	395
	D	487	487
	E	1,010	1,760
Weight (kg)		35.0	40.0



There are a wide range of accessories available for the TWC that will allow the user greater flexibility.

- 60322 Quick Release Kit allows for a more streamlined and efficient calibration laboratory
- 60324 Hexagon Adaptor Kit for use with the TWC Manual allows users to speed up the workflow by implementing their own solution to rapidly manoeuvre the wrench up to the reaction point
- 60330 Offset Angle Plate Kit allows for greater flexibility when calibrating fixed head torque wrenches

8	TWC ANCILLARIES
60318	Static Transducer Support Kit
60319	Short Length Reaction Post
60322	Quick Release FMT Kit
60323	Pro-Test and Static Torque Block Adaptor Kit
60324	Hexagon Adaptor Kit
60327	FMT 25 Adaptor Kit
60329	3 kg Mass Weight
60330	Offset Angle Plate Kit
29214	1" Male to 3/4" Female Flanged Square Drive Adaptor
29215	1" Male to 1/2" Female Flanged Square Drive Adaptor
29216	1" Male to 3/8" Female Flanged Square Drive Adaptor
29217	1" Male to 1/4" Female Flanged Square Drive Adaptor



60318 Static Transducer Support Kit and
60319 Short Length Reaction Post



60322 Quick Release FMT Kit



60330 Offset Angle Plate Kit



60323 Pro-Test and Static Torque Block Adaptor Kit



29214 Flanged Square Drive Adaptor



60324 Hexagon Adaptor Kit



60329 3 kg Mass Weight



For a complete torque wrench calibration system, just add the transducer range appropriate for the wrenches you wish to calibrate and accessories from page 100.

- Enables torque wrench calibration or testing in accordance with ISO 6789:2017 Part 1 and 2
- Counterbalance Reaction system is designed to support the weight of the wrench so that the weight does not become a parasitic force within the calibration system. The floating nature of the support means that the wrench is able to find its own natural level rather than being constrained as in many other loading devices. Any such constraint will be a parasitic force within the system (Patents apply)
- Lightweight alloy construction ensures the TWC is easily transported, making it well suited for mobile laboratory applications
- Works with Flange Mounted Transducers and Static Transducers
- During calibration, the TWC maintains a fixed position on the handle of the torque wrench
- Rotating transducer design ensures that the load is applied 90° to the torque wrench handle. The benefit of this precise alignment is that forces are applied squarely to the load point of the handle
- Supplied with a powerful yet simple touchscreen User Interface (UI) (keyboard and mouse also supported if desired)
- Flexible tool template system; minimises number of templates required to cover a wide range of tools, aiding efficient use
- Programmable calibration workflow for each template, can be pre-set to ISO compliant flow for the given tool for a faster set-up or can also support bespoke workflows

- Calibration job management; book calibrations, track progress of previous bookings and resume them
- Automated management of calibration and conformance workflows for non-indicating tools
- Intelligent rate control system ensures fast cycling of tools while maintaining compliance with 2017 standards
- Environmental monitoring (humidity/temperature) to ensure compliance with calibration standards
- Automated management of uncertainty data for ISO 6789-2:2017 calibrations, guiding the user through the process using dynamically generated instructions based on the current tool's ISO classification and workflow
- Inbuilt data analysis and certification generation seamlessly move from calibration/conformance procedure to certificate generation, no third-party software required
- A substantial amount of inbuilt storage allowing for several years' worth of calibration data through normal use
- The TWC control Box is supported by a UKAS accredited certificate of calibration, we remain one of the few manufacturers in the world that issue a UKAS accredited calibration certificate both for the instrument and for the torque transducer. In doing so, customers can swap combinations of instrument and transducer while retaining complete traceability
- Any Transducer must not be used below 5% of its capacity when used with TWC Auto

5	TORQUE WRENCH CALIBRATOR (TWC)
60312	Torque Wrench Calibrator 400 N-m Auto
60313	Torque Wrench Calibrator 1,500 N-m Auto



Torque Wrench Calibrator (TWC) Auto shown with a Professional Model 200 and a Static Transducer with support kit (not included)

Software Screen Shots:



Main menu



Tool template editor

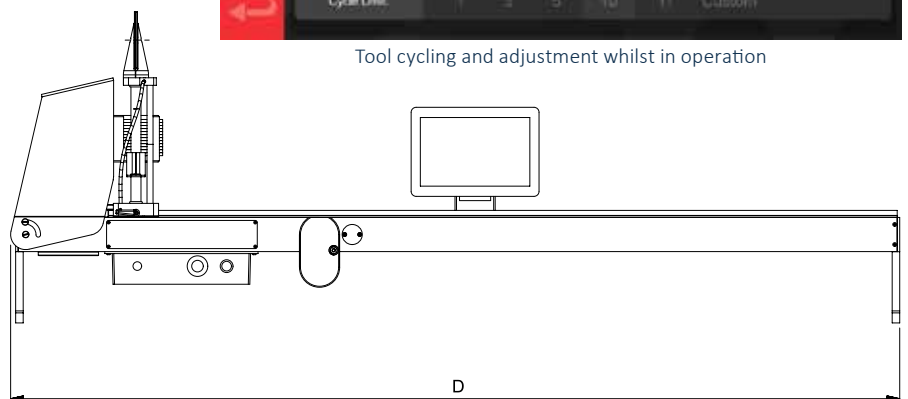
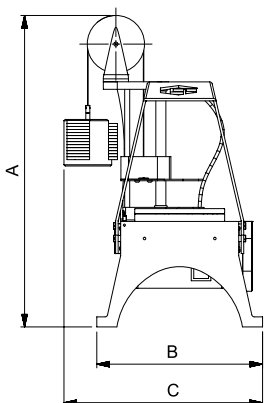


Calibration job booking / editor



Tool cycling and adjustment

Model	TWC Auto 400	TWC Auto 1500
Part Number	60312	60313
Wrench Length (Torque Radius)	Min	135
	Max	750
Dimensions (mm)	A	620
	B	330
	C	395
	D	1,019
Weight (kg)	40.0	45.0



Tool cycling and adjustment whilst in operation