Title:	TRACE Calibration Procedures for Torque Tools

1.0 PURPOSE

To provide basic operational guidance, procedural and technical direction for the certification and testing of torque tools.

2.0 Instruction

2.1 Requirements

- The torque tool shall be tested at a recorded ambient temperature, with an allowable range. This ideally should be 20°C ±2°C, as per the requirements for our current Nata endorsement.
- The correct transmitter with appropriate range shall be selected in order to calibrate the device under test.
- Visual checks for condition and usage shall be made before calibration to ensure the device under test is still in working condition.
- The device under test shall be exercised 3-5 times prior to recording measurements.

2.2 Accuracy

- In reference to ISO 6789, all hand torque tools shall be tested to an accuracy of ±3%. Unless the hand torque tool is tested to manufacturer's accuracy of ±4%.
- All devices under 20N.m shall be tested to an accuracy of 4%.
- Torque screwdrivers shall be tested to an accuracy of 6%.
- Test points shall be selected at 20%, 60% and 100% of the range of the device under test, or as close as possible. Some devices have a minimum of over 20%.

2.6 Reporting

- Rotation of test shall be reported (clockwise / anticlockwise).
- All data shall be input into the torque tool workbook SVP-001-101, this also has the relevant uncertainty calculation for each test point.
- File work sheet and copy of calibration certificate together.

NOTE: *"Uncertainty of Measurement with 95% confidence level"*.

Refer to Work Instruction PWI-21 for detailed instruction.

3.0 REVISION

- Created to comply with WIKA Work Instruction format – 06/08/2024