

Technical Information

ILAC/UKAS ACCREDITED CALIBRATIONS T011 Guidance on thread gauge, pressure gauge & torque wrench calibration standards

Whilst ISO 9001 does cover measurement it isn't an assurance of competence and technical capability of a laboratory and therefore it is not sufficient evidence of demonstration of the competence of the laboratory or assurance of traceability to national / international standards of the calibrated equipment.

Measurement equipment that has a significant influence on the results of the inspection, needs to be calibrated before being put into service, and thereafter calibrated according to an established programme. The overall programme of calibration of equipment shall be designed and operated to ensure that, wherever applicable, measurements made by the inspection body are traceable to national or international standards of measurement. According to ILAC the preferred routes for conformity assessment bodies who seek external services for calibration of their equipment are defined in subsections 1) and 2) ILAC P10 section 2. ILAC is the Internal Laboratory Accreditation Cooperation and is the international authority on laboratory and inspection body accreditation.

Based upon above, IDEST centres must comply with the following:

- Thread gauges need a full ILAC/UKAS ISO/IEC 17025 certification, or (for new gauges) a manufacturer's calibration certificate.
- Pressure gauges need a full ILAC/UKAS ISO/IEC 17025 certificate showing calibration to ISO 837, or (for new gauges) a manufacturer's calibration certificate.
- Torque wrenches need an ILAC/UKAS ISO/IEC 17025 certificate to comply with ISO 6789:2017 parts 1 and 2; or alternatively ISO 6789:2003; or a certificate that shows testing throughout the measurement range using torque transducer has been calibrated by a ILAC/UKAS ISO/IEC 17025 laboratory and has a registered calibration number and is in date; or (for new wrenches) a manufacturer's calibration certificate.

IDEST maintains a register of ISO/IEC 17025 certified calibration companies, this is available from the website.

UKAS also have a document TP 41 "UKAS Policy on Metrological Traceability" that describes metrological traceability requirements contained within the latest **ISO/IEC 17025** Standards

Please note, it is important to specify in your purchase order that you require "Calibration and certification to **ISO/IEC 17025**" as some calibration houses, whilst holding the necessary certification, do not issue an ISO/IEC 17025 certificated calibration as standard. On receipt check all certificates show the ISO/IEC 17025 logo and laboratory number. **IDEST will, during inspections!**

The general calibration interval for thread, pressure and torque metrology is every 12 months. For thread gauges that are used infrequently a longer calibration interval of the earliest of 3-years or 250 uses may be requested. See T013 for more details.