SAFETY THROUGH ACCURACY OF TEST INSTRUMENTS

NICEIC Business's have a responsibility to ensure the accuracy and consistency of their test instruments used to carry out the range of tests required by BS 7671 for certification and reporting purposes. Therefore your business should already have in place an effective system, which enables you to confirm the continuing accuracy and consistency of all your test instruments.

There are a number of ways to do this, including:

- Maintaining records of the formal calibration/re-calibration of test instruments as recommended by the instrument manufacturers, supported by calibration certificates with measurements traceable to national standards, issued by organisations recognised by Certification or Registration Bodies for the purposes of checking the accuracy of test instruments. Certificates issued by UKAS accredited laboratories are preferable
- Maintaining records over time of comparative cross-checks with other test instruments used by the business*
- Maintaining records over time of measurements of the characteristics of designated reference circuits or devices.

For example, the consistency of continuity, insulation resistance and earth electrode test instruments could be checked against a proprietary resistance box or a set of suitable resistors.

Earth fault loop impedance test instruments could be checked by carrying out tests on a designated socket-outlet (on a non-RCD protected circuit) in the business's office.

RCD test instruments could be checked by carrying out tests on an RCD unit plugged into the designated socket-outlet.

We recommend all systems start from formal calibration. Each test instrument used by the business should be clearly and uniquely identified for record and traceability purposes. During your assessment, the Assessor will check the effectiveness of the system you have in place. If you are unable to demonstrate to the satisfaction of the Assessor that an effective control system is in place which ensures the continuing accuracy and consistency of the test instruments used to carry out the tests required by BS 7671, the Assessor will record a non-compliance in the Assessment Report.

*These systems can only provide a measure of confidence in the consistency of test measurements over time.The accuracy of each test instrument will need to be confirmed before any reliance can be placed in such systems.

Note: New or repaired test instruments may not be supplied with calibration certificates unless specifically requested.

Please see our Test Instrument Accuracy Record example here