



Safety through accuracy of test instruments

Important information for NICEIC Contractors

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

During your assessment visit, your NICEIC Assessor will check the effectiveness of the system you have in place.

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 issued by recognised organisations with measurements traceable to national standards. Certificates issued by UKAS accredited laboratories are preferable. We recommend more frequent checks as detailed below to ensure continuing accuracy and consistency.
- 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, the NICEIC Calcard 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 your 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. If you are unable to demonstrate to the satisfaction of the NICEIC 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.



Test Instrument Logbooks are available to purchase at www.niceicdirect.com



Test Instrument Accuracy Record (summary)

Instrument function*: Acquisition date:

Make: Model:

Serial No or other assigned identity:

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Location of any designated socket-outlet, or description of any device, used for reference checking purposes:

Date:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Formal calibration certificate:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Check against designated reference circuit/device:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Cross-check against another test instrument:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Identity of other test instrument:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Repair:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Remarks:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Full details of the results of the accuracy checks, including any calibration certificates, are to be retained for record purposes in support of this summary.
*Separate records are required for each function of a multi-function test instrument.
Test Instrument Logbooks are available to purchase through our Direct shop, and can be used as separate records for each test instrument.