

Dutch Accreditation Council (RvA)

Calibration on site

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RvA information documents describe the RvA rules and its policy on specific subjects. A current version of the information documents is available through the RvA web site (www.rva.nl).

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1 Introduction

One of the aspects about being assessed during an assessment regarding a RvA-accreditation, is the environment in which the measurements are being conducted, temperature, humidity, vibrations, dust particles, electro-magnetic interference.

This means that accredited laboratories may conduct the calibrations exclusively in a specific area approved of by the assessment team.

However in practice it is desirable or necessary that some of the measurements are conducted " on site " meaning the area in which the equipment to be investigated is located.

In such cases a few extra procedures relating to management and transportation of the standards en the performance of measurements are necessary.

2 Accreditation procedure

- Accreditation for calibrations on location needs to be enquired separately (supplementary assessment, resp. extra aspects when assessing). In this case it is important to indicate which parameters, measuring rates or uncertainties are involved.
- during assessment (in case it is necessary) a calibration on site is attended
- during a surveillance visit a calibration on site is attended
- because of this possible extra costs may be involved

3 Specific demands required from the laboratory

(Separate) calculation of best measurement capabilities

(Separate) procedure measurement uncertainties (more external influences)

Procedures for transportation of owned measuring equipment (packing, temperature, mechanical shocks, etc.)

These are also needed (in case it applies to) for the reference-standards. This way it will be prevented that thermometers or standard resistors in a not suitable packing will be offered!!

Procedures concerning the environmental conditions on site:

- assessing temperature (gradient) with calibrated thermometer(s);
- no conducting of calibration outside certain temperature limits;
- in case the temperature varies during the investigation, the temperature territory (including uncertainty) needs to be reported;

- if applicable: indications for measurements set ups (no weighing activities on unstable tables, make sure there are no sources of interference connected to the same electric group or can influence the measurements one way or the other, etc.);
- procedures concerning stabilisation time after setting up connections, etc.;
- keep the instrument powered up during transportation , maximum allowed switch off time;
- the used standards before taken into use are supposed to be examined by a routine-control or, in case this is not possible, it needs to be checked before and after the transportation in their own laboratory (this does imply a complete calibration!) just a few standards according to laid down and accepted procedures by RvA.
- all relevant procedures ought to be available at the location where measurements are performed.

4 The accreditation certificate; scope of accreditation

In the scopes of accreditation of laboratories who are only accredited for calibrations in their own laboratories, needs to be added to the comments:

This directory of scopes of accreditation exclusively applies to calibrations who are performed in their own laboratories.

(An accreditation exclusively for calibrations on site is not a major issue; if it can be performed in any laboratory, one may also perform it in their own laboratory)

In case an accreditation (also) applies to calibrations on site, it will also apply for a part to the parameters respectively measurement ranges and to a bigger uncertainty. In this case these ranges with their uncertainties can be mentioned separately.

The above mentioned remark sounds as follows:

- This scope of accredited activities refers to, as far as nothing else has been indicated, to calibrations performed in their own laboratories.
- The remarks concerning the temperature will be adjusted.
- The ambient temperature in which the calibrations are conducted, for example 22 °C
- And the next particular remark:
- Calibrations to be performed on location

5 RvA-Calibration Certificates

With regard to the regular certificates needs to be added:

- a good description of the place of research
- relevant particular conditions of environmental conditions

6 Modification compared to previous revision

Compared to the previous revision of the information document the following modifications are included:

- New format;
- NKO replaced by RvA.
- Literature references removed.