7.6 Control of monitoring & measuring equipment

All monitoring and measurement equipment used for product and process verification must be controlled and calibrated against nationally traceable standards at specified intervals.

You should ensure that such devices are available to guarantee continuity of in-process measurement capabilities. All test equipment must be calibrated either:

* At regular, planned intervals
* Or prior to use

In either case the basis of calibration must be traceable back to an approved laboratory. You must check the laboratory's credentials, this links to Supplier evaluation.

### How do I ensure valid results?

Monitoring and measuring equipment must be:

* Calibrated or verified at specified intervals or prior to use, based on recognized standards
* Adjusted or re-adjusted as necessary in accordance with manufacturer’s instructions
* Identified to enable calibration status to be determined
* Safeguarded from adjustment, which would invalidate measurement results
* Protected from damage or deterioration during handling, maintenance or storage

### How do I control monitoring and measuring equipment?

* Records of calibration and verification results are maintained in accordance with 4.2.4 Control of records
* The validity of previous measurements when a device is found not to conform to requirements
* Computer software used for monitoring and measuring is validated prior to initial use
* Computer software used for monitoring and measuring equipment is re-validated as necessary

### What happens if equipment fails a calibration test?

Decide what action will be taken where test equipment fails calibration, e.g. decide if a product recall is necessary or try to revalidate previous measurements using calibrated equipment. This links to Control of non-conformance.

### How do I ensure traceability?

Each instrument should be traceable through its own calibration record which contains:

* Identification number
* Manufacturer and model
* Frequency of calibration
* Reference standards used
* Validation certificates and calibration findings
* Details of actions be taken in case of unsatisfactory results

### Exclusions

Some organisations do not utilise monitoring and measuring equipment; if this is the case, you are free to exclude this requirement from your quality management system - so long as the excluded requirement does not:

* Affect the ability of the organisation to meet customer and regulatory requirements
* Affect the ability of the organisation to provide conforming products or services

### Should I document our Control of Monitoring and Measuring Equipment Process?

It is not a mandatory requirement to document your control of monitoring and measuring equipment process. However, you should always look to adequately define and control any operational processes that directly impact upon product quality. Therefore, the implementation of a control of monitoring and measuring equipment procedure will be appropriate to most businesses where such activities are undertaken.

### How's best to document the process?

Develop and implement a procedure that defines:

* How measuring equipment is calibrated
* The frequency of calibration
* Suitable identification of calibration status
* How to protect equipment from damage

### Measuring the effectiveness of the processes

The effectiveness of the control of monitoring and measuring equipment process is often determined by how an organisation validates its controlled equipment and how it assures validity of subsequent measurements. The competence of staff using monitoring and measuring equipment is sometimes scrutinised.