

SOP Template: Purpose and Scope of Equipment Calibration

This SOP defines the **purpose and scope of equipment calibration**, detailing the objectives, applicable instruments, and calibration procedures to ensure measurement accuracy and consistency. It covers the identification of equipment requiring calibration, frequency of calibration activities, roles and responsibilities, and documentation requirements to maintain compliance with quality standards and optimize operational performance.

1. Purpose

The purpose of this Standard Operating Procedure (SOP) is to establish guidelines for the calibration of equipment. This ensures that all measurements and processes are conducted with instruments that meet predetermined accuracy and reliability standards. Proper calibration supports product quality, regulatory compliance, and operational efficiency.

2. Scope

This SOP applies to all equipment and instruments used for measuring, testing, and monitoring within the organization that directly or indirectly affects product quality or regulatory compliance. It encompasses:

- Identification of equipment requiring calibration
- Applicable locations and departments
- Defined calibration intervals/frequency
- Roles and responsibilities for calibration activities
- Documentation and records management

3. Objectives

- To ensure accuracy and reliability of measurement instruments
- To prevent production errors caused by equipment drift or malfunction
- To comply with regulatory and quality management standards
- To establish a schedule for regular calibration and traceability

4. Identification of Equipment

- List and assign unique identification numbers to equipment requiring calibration
- Include measuring devices, gauges, sensors, reference standards, etc.

5. Calibration Frequency

- Define calibration intervals based on manufacturer recommendations, regulatory requirements, or risk assessment
- Maintain a calibration schedule

6. Roles and Responsibilities

- **Quality Assurance:** Oversight and review of calibration activities
- **Technicians/Engineers:** Conduct calibration, record data, and report deviations
- **Department Heads:** Ensure compliance and resource allocation

7. Documentation Requirements

- Maintain calibration certificates and records
- Record date, results, technician, and next due date for each activity
- Log non-conformities and corrective actions

8. Compliance

All activities must adhere to applicable industry standards, internal quality policies, and regulatory requirements relevant to equipment calibration.

9. Review and Updates

This SOP shall be reviewed annually or when significant changes occur in equipment, processes, or regulatory standards.