

SOP Template: Pre-calibration Equipment Inspection Procedures

This SOP describes the **pre-calibration equipment inspection procedures**, including the systematic examination of calibration instruments, verification of equipment cleanliness, assessment of environmental conditions, and confirmation of proper functionality before calibration. The goal is to ensure accuracy, reliability, and consistency in calibration activities by identifying and addressing potential equipment issues prior to use.

1. Purpose

To outline standardized procedures for inspecting equipment prior to calibration to maximize reliability and reduce measurement errors.

2. Scope

This SOP applies to all personnel conducting calibrations and all calibration equipment in the [Lab/Department Name].

3. Responsibilities

- **Calibration Technicians:** Perform inspections according to this procedure and document findings.
- **Supervisors/Managers:** Oversee compliance and provide training as necessary.

4. Definitions

Term	Definition
Calibration Equipment	Devices and instruments used to perform calibration tasks.
Inspection	Systematic examination of equipment to ensure conformance with acceptance criteria.
Nonconformance	Any deviation from expected condition or specification.

5. Procedure

- 1. Preparation**
 - Review relevant calibration procedures and equipment manuals.
 - Gather necessary inspection checklists and documentation forms.
- 2. Visual Equipment Examination**
 - Inspect the exterior and interior (if applicable) for signs of damage, corrosion, or wear.
 - Check for missing components, accessories, or labels.
- 3. Verification of Cleanliness**
 - Ensure all surfaces, connectors, and interfaces are free from dust, dirt, and contaminants.
 - Clean equipment as required, following manufacturer instructions.
- 4. Assessment of Environmental Conditions**
 - Confirm the inspection area meets the required environmental conditions (temperature, humidity, etc.).
 - Record environmental conditions in the inspection log.
- 5. Functional Checks**
 - Power on equipment and verify basic operation (display, controls, indicators).
 - Test applicable functions to confirm proper performance.
 - Check batteries or power supply as necessary.
- 6. Documentation**
 - Complete all relevant inspection forms, noting any discrepancies or required corrective actions.

- Notify supervisor/manager of any nonconformance.

7. Approval for Calibration

- Only proceed with calibration if the equipment passes all inspection steps.
- Tag or label equipment as “Ready for Calibration.”

6. Records

Maintain completed inspection checklists and logs as part of calibration records for a minimum of [insert retention period].

7. References

- Equipment Manufacturer Manuals
- [Organization/lab-specific calibration procedures]
- ISO/IEC 17025 or relevant standards

8. Revision History

Revision	Date	Description	Approved By
1.0	[Date]	Initial Release	[Name/Title]