# Quality Inspection Work Instruction

## Machined Parts

**Document No.:** _____
**Revision:** _____
**Date:** _____

**Prepared by:** _____
**Approved by:** _____

### 1. Purpose

To ensure that machined parts meet the required specifications and quality standards prior to release.

### 2. Scope

This instruction applies to all machined parts produced in-house or received from suppliers.

### 3. References

- Engineering Drawing / Specification
- Quality Manual
- Inspection Standard / Gauge List

### 4. Inspection Tools

- Vernier Caliper
- Micrometer
- Height Gauge
- Gauge Blocks / Pin Gauges
- Surface Finish Gauge

### 5. Procedure

1. **Visual Inspection**
    - Check for physical damage, burrs, scratches, or other defects.
    - Ensure part is clean and free from contaminants.
2. **Dimensional Inspection**
    - Verify all critical dimensions as per drawing using calibrated measuring tools.
    - Record measurements in the inspection report.
3. **Surface Finish & Tolerance Check**
    - Examine surface finish as specified in the drawing.
    - Check geometric tolerances (flatness, roundness, etc.).
4. **Functional Check (if applicable)**
    - Fit and function checks per requirement.
5. **Marking & Identification**
    - Mark inspected parts according to procedure.
6. **Documentation**
    - Record all results and deviations in the inspection report.
    - Report any non-conformance as per procedure.

### 6. Inspection Record (Sample)

| Part Number | Drawing Rev. | Characteristics | Spec./Tolerance | Measured Value | Status | Inspector | Date |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

**Inspector Signature:** _____

**Date:** _____