ChecklistGuro

Statistical Process Monitoring (SPM) Checklist

Process Definition & Identification

Ensures the process being monitored is clearly defined and its critical characteristics are understood.

Process Description

Write something...

Process ID / Code

Enter a number...

Process Type (e.g., Machining, Assembly, Coating)

- [ ] Machining
- [ ] Assembly
- [ ] Coating
- [ ] Molding
- [ ] Other

Critical Process Parameters (CPPs)

Write something...

Process Input Materials/Components

Write something...

Target Value (for key CPP)

Enter a number...

Potential Process Risks/Variability Sources

Write something...

Data Collection & Recording

Focuses on the accuracy, reliability, and completeness of data being collected for process monitoring.

Sample Size (n)

Enter a number...

Sampling Frequency (Units/Time)

Enter a number...

Data Point Interval (Time)

Enter a number...

Data Source

- [ ] Manual Data Entry
- [ ] Automated System (e.g., PLC, SCADA)
- [ ] Laboratory Analysis

Description of Data Collection Equipment

Write something...

Units of Measurement

- [ ] mm
- [ ] inches
- [ ] kg
- [ ] lbs
- [ ] Other - Specify

Data Validation Procedures (e.g., range checks, duplicate entries)

Write something...

Date of Last Data Collection Procedure Review

Enter date...

Control Chart Selection & Implementation

Details the appropriate control chart type chosen and its proper implementation for the monitored process.

What type of control chart is being used?

- [ ] X-bar and R Chart
- [ ] X-bar and S Chart
- [ ] Individuals Chart
- [ ] C Chart
- [ ] U Chart
- [ ] p Chart
- [ ] np Chart
- [ ] Other (Specify in Long Text)

If 'Other' was selected, please specify the control chart type used.

Write something...

Number of subgroups analyzed for control limit calculation.

Enter a number...

Date of initial control chart implementation.

Enter date...

Is the control chart being monitored manually or automatically?

- [ ] Manually
- [ ] Automatically

Frequency of data collection (e.g., hourly, daily, weekly).

Enter a number...

Brief description of the process variables being monitored.

Write something...

Control Limit Calculation & Validation

Focuses on ensuring control limits are calculated correctly and periodically validated for accuracy.

Number of Data Points Used for Initial Control Limit Calculation

Enter a number...

Method Used for Control Limit Calculation (e.g., Moving Range, X-bar and R Chart)

Write something...

D3/D4 Factor Used (if applicable)

Enter a number...

Distribution Assumption for Data (e.g., Normal, Unknown)

- [ ] Normal
- [ ] Unknown

Date of Last Control Limit Recalculation

Enter date...

Frequency of Control Limit Recalculation (in days/weeks/months)

Enter a number...

Justification for Recalculation Frequency

Write something...

Process Stability Evaluation Method (e.g., MSA, Process Capability Index)

- [ ] MSA
- [ ] Process Capability Index

Out-of-Control Action & Response

Outlines procedures for identifying, investigating, and correcting out-of-control conditions.

Number of Points Exceeding Control Limits

Enter a number...

Detailed Description of the Out-of-Control Condition

Write something...

Potential Root Cause Category (e.g., Material, Equipment, Operator, Method)

- [ ] Material
- [ ] Equipment
- [ ] Operator
- [ ] Method
- [ ] Environment
- [ ] Other

Investigation Steps Taken to Determine Root Cause

Write something...

Corrective Actions Implemented

Write something...

Date Corrective Action Implemented

Enter date...

Verification of Corrective Action (How Effectiveness Was Confirmed)

Write something...

Resolution Status

- [ ] Resolved
- [ ] In Progress
- [ ] Pending Further Investigation

Signature of Person Verifying Resolution

Documentation & Training

Covers the documentation of SPM procedures and training provided to personnel involved.

Number of Personnel Trained on SPM Procedures

Enter a number...

Date of Last SPM Training Session

Enter date...

Brief Summary of SPM Training Content

Write something...

Copy of SPM Training Materials (e.g., manual, slides)

Upload File

Type of Training Provided (Check all that apply)

- [ ] Classroom
- [ ] Online
- [ ] On-the-Job

Description of refresher training schedule

Write something...

Are training records readily accessible?

- [ ] Yes
- [ ] No

Summary of the documentation procedures for SPM?

Write something...

Periodic Review & Improvement

Addresses the ongoing review of SPM system effectiveness and opportunities for improvement.

Date of Last SPM System Review

Enter date...

Frequency of System Review (Months)

Enter a number...

Summary of Review Findings

Write something...

Action Items Identified During Review

Write something...

Were any control charts deemed ineffective?

- [ ] Yes
- [ ] No

Areas for potential improvement?

- [ ] Data Collection Methods
- [ ] Control Chart Selection
- [ ] Operator Training
- [ ] Software/Tools
- [ ] Process Understanding

Description of Actions Taken to Address Improvements

Write something...

Target Completion Date for Improvement Actions

Enter date...

Name of Person Responsible for Improvement Actions

Write something...