

## **Process Capability Study Checklist**

## **Planning & Scope Definition**

Ensures the study is properly planned and the scope is clearly defined to ensure relevant data is collected and analyzed.

Process Name	
Write something	
Process Description	
Write something	
Study Objective	
Identify Capability	
Assess Improvement	
Meet Specification	
Sample Size (Planned)	

Study Start Date	
Enter date	
Specification Limi	ts (USL, LSL)
Write something	
Critical to Quality	(CTO) Attribute?
Yes	(or Q) Attailoute.
☐ No	
Potential Sources	of Variation
Material	or variation
Equipment	
Method	
Manpower	
Environment	
ata Collect	ion & Preparation
cuses on the collec ta cleaning.	tion and initial preparation of data, including sampling methods a
Sample Size (n)	

Sampling Method  Random Systematic Stratified Convenience
Rationale for Sample Size
Write something
Data Collection Start Date
Enter date
Data Collection End Date
Enter date
Number of Subgroups (if applicable)
Enter a number
Data Points/Variables Measured  Length Diameter Weight Surface Finish Other (Specify in Long Text)

Write something		
Description of any Da	ta Cleaning Steps Performed (e.g., outlier removal)	
Write something		
	lysis & Calculations	
vers the actual statistic culating key metrics.	al analysis performed to determine process capability, in	cludir
Sample Size (n)		
Enter a number		
Mean (X)		
Mean (X)  Enter a number		
	)	
Enter a number		
Enter a number  Standard Deviation (s		
Enter a number  Standard Deviation (s		

Lower Specification Limit (LSL)
Enter a number
Cp Calculation
Enter a number
Cak Coloulation
Cpk Calculation
Enter a number
Pp Calculation
Enter a number
Ppk Calculation
Enter a number
Distribution Type Assumed (e.g. Normal)
Distribution Type Assumed (e.g., Normal)  Normal
Non-Normal - Further Analysis Required

## **Interpretation & Reporting**

Addresses the interpretation of results and the creation of a clear and actionable report.

Executive Summary of Findings	
Write something	
Cp (Process Capability Index)	
Enter a number	
Cpk (Process Capability Index - Lower)	
Enter a number	)
Cpm (Process Capability Index - Adjusted)	
Enter a number	)
Process Meets Capability Requirements?	
Yes	
No No	
Needs Further Investigation	
Explanation of Capability Index Results & Trends	
Write something	

Write something	
Control Chart I	nage
4 Upload File	
Potential Risks	Identified during the Study
Write something	
cuses on the ste	Action & Follow-Up ps taken to improve process capability and ensures follow-up action
cuses on the ste tracked.	<u>-</u>
cuses on the steetracked.	ps taken to improve process capability and ensures follow-up action entified root cause(s) of the process capability deficiency.
cuses on the steetracked.  Describe the id  Write something	ps taken to improve process capability and ensures follow-up action entified root cause(s) of the process capability deficiency.
cuses on the steet tracked.  Describe the id  Write something	ps taken to improve process capability and ensures follow-up action entified root cause(s) of the process capability deficiency.

Enter a number	
Target Complet	ion Date for Corrective Actions
Enter date	
Assigned Respo	onsibility for Corrective Actions
Production Eng	
Maintenance Te	
Quality Engine	
Process Owner	
Wnich departme	ents will be involved in the corrective action?
Engineering	
Quality	
Maintenance	
Wainterface	
Describe the sp actions.	ecific metrics used to verify the effectiveness of corrective
Write something.	
Date of First Ve	rification Measurement
Date of First Ve	rification Measurement

Status of Corrective Action
Not Started
☐ In Progress
Completed
☐ Delayed
Documentation & Record Keeping
Covers the documentation of the entire process capability study for future reference and
auditing.
Study Start Date
Enter date
Study Completion Date  Enter date
Study Objective and Scope Description
Write something
Raw Data File(s)
□ Upload File     □ U
Statistical Analysis Output (e.g., Minitab, Excel)
4 Upload File

Summary of Findings & Conclusions
Write something
Description of Corrective Actions Taken (if any)
Write something
Revision Number of Document
Enter a number
Document Status (e.g., Draft, Approved, Obsolete)
Draft
Approved
Obsolete
Reviewer Signature