

Introduction

QC-CALC SPC is a complete SPC package that analyzes the data collected by QC-CALC Real-Time. The wide variety of charts and reports available in QC-CALC SPC allows close monitoring of the manufacturing process in order to stay in control. In seconds, QC-CALC SPC gives a precise picture of how the production line is performing with easy-to-use menus.

Key Benefits

- Record and Characteristic filtering
- Control charts
- Process capability charts
- Attribute charts
- Ability to print to PDF and email reports
- Built-in report designer
- Remote Real-Time monitoring
- Multiple database grouping
- 21 CFR Part 11 compliance
- Built-in password protection

Reporting

Reporting in QC-CALC SPC analyzes the data and prints the charts to a printer, print preview, or to a file. The following report types are available:

Control Charts

- Xbar & Range
- Xbar & Sigma
- Median & Range
- Individual & Range

Process Charts

- Histogram Analysis
- Probability Plots
- Pareto Analysis

Attribute Charts

- P Chart • Np Chart
- U Chart

Miscellaneous Reports

- Statistical Summary
- Raw Data
- First Article
- Non-Conformance
- Gage R&R (Range & ANOVA)
- 21 CFR Part 11 Audit Report

Record Filtering

Quickly display and report on the data needed at the moment.

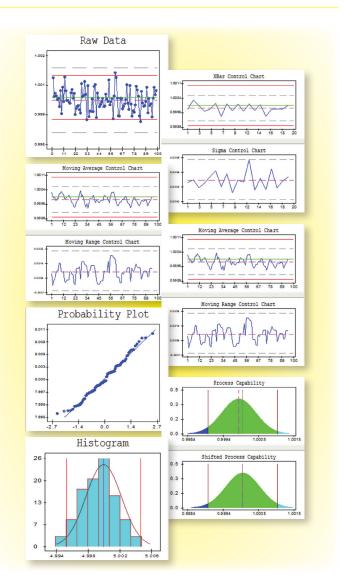
Characteristic Filtering

Reduce on-screen clutter to guickly identify only the most critical characteristics.

21 CFR Part 11 Compliance

The features that make QC-CALC so flexible can be controlled using the built-in Administrative Tool to guarantee total control of changes. This system includes an audit report showing all password protected changes.

Sample.qcc								
(4) Line Length D	leviatio	n: N/A	Selected: None	Real-Time Subgroup Size:	1 SPC Subgroup Size:	5 Records: 76 - 100		
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	75		1.465	2.5073	3.57	4.529	5.4885	6.4
Cpk= 0.54	76		1.440	2.5448	3.55	4.466	5.5917	6.54
(9) Chamfer Angle	77		1.504	2.4508	3.50	4.478	5.5824	6.3
7.1	78		1.435	2.5413	3.49	4.447	5.3902	6.55
A / 18A	79		1.456	2.2876	3.44	4.558	5.5150	6.5
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Cok= 0.56	81	0081	1.422	2.4974	3.48	4.385	5.4725	6.43
(13) Thread Pitch	82		1.630	2.4432	3.44	4.552	5.5192	6.5
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1 V V V	85	0085	1.474	2.4254	3.44	4.496	5.4702	6.5
V	86	0086	1.634	2.4075	3.44	4.514	5.5160	6.49
Cpk= 0.54	87	0087	1.603	2.4411	3.60	4.544	5.4669	6.45
	88	0088	1.414	2.5515	3.51	4.536	5.5184	6.5
	89	0089	1.302	2.4561	3.53	4.455	5.5246	6.6
	90	0090	1.440	2.6040	3.46	4.543	5.4463	6.50
	91		1.386	2.5311	3.50	4.492	5.4545	6.60
Cok= 1.73	92		1.527	2.4233	3.48	4.458	5.4803	6.51
1	93	0093	1.367	2.4603	3.41	4.581	5.4632	6.63
	94	0094	1.449	2.4169	3.50	4.505	5.3725	6.5
Last Record: 100	95	0095	1.517	2.4767	3.61	4.457	5.5054	6.4
Last Record: 100		0096	1.536	2.4886	3.43	4.677	5.6042	6.4
Cast Record. 100	97	0097	1 410	2.4275	3.50			



- C Chart
- Process Capability (Cpk)
 - Raw Data w/ Outlier Detect

Individual & Moving Range

Moving Average & Range

• Bivariate Analysis Report

- Correlation & Regression



Grouping

Create a concise summary report by opening multiple files simultaneously across different inspection equipment. Each file can be displayed in a spreadsheet or as plots, similar to QC-CALC Real-Time.

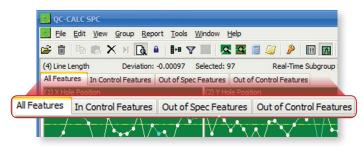


Monitoring

As the CMM runs, QC-CALC Real-Time is updating its live screen while QC-CALC SPC displays the same data in another location (remote office, machining center, etc...). Monitor a single file, a group of files, or the inspection machine itself and see the data in either live plots or in grid form.

Tabs in Plot View

When using the Plot View option, multiple tabs are available to quickly switch between the dynamic Characteristic Filters.



Multiple Characteristic Reporting

Due to the large number of characteristics that can be saved in each file a secondary option is available for the reports within QC-CALC SPC. Using the Multiple Plots option provides a brief overview of the statistics for each characteristic along with the corresponding graph for that report type.



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