State-of-the-Art Measurement Analysis Software, Training and Consulting Services

★Celebrating over 22 YRS of Excellence and Innovation 1987-2010

SPCView FAQs

Integrated Sciences Group answers frequently asked questions about our SPCView software. The answers are intended to provide further clarification about the capabilities of our statistical measurement process analysis and control product. If you have any questions or comments regarding any of the FAQ topics listed below or would like us to answer additional questions, please contact us at isg@isgmax.com.

Question	Answer
What makes SPCView different from other statistical process control (SPC) software?	SPCView is the only application designed to provide statistical control of measurement processes. With SPCView you can develop and evaluate control charts for measurements obtained from testing and calibration processes.
	Unlike other SPC software, the uncertainty in measured values can be used to establish weighted fits of trend analyses. SPCView imports measurement uncertainty analysis results from UncertaintyAnalyzer, and allows the development of control limits using a variety of criteria and options. In addition to measurement process control, SPCView includes parameter value tracking and calibration interval analysis capability.
	Calibration intervals for the performance parameters of reference standards and other measuring equipment are determined from trend and uncertainty growth analysis to establish intervals commensurate with either a measurement reliability target or a parameter bias uncertainty target.
Why is SPCView designed as a plug-in application for UncertaintyAnalyzer?	Measurement processes cannot be adequately analyzed and controlled without the quantification and evaluation of measurement uncertainty. Consequently, we developed SPCView as a plug-in to UncertaintyAnalyzer because UncertaintyAnalyzer is the most versatile, state-of-the-art tool for analyzing any type of measurement process, from very simple to highly complex.
How does SPCView's interval analysis capability compare to other ISG software?	SPCView uses measured values, referred to as "variables data," and associated uncertainties to project drift and uncertainty growth and establish optimal calibration intervals for performance parameters of individual measuring equipment such as reference standards.
	IntervalMAX uses reliability modeling methods to analyze

SPCView FAQs

Question	Answer
	historical pass/fail (i.e., in-tolerance or out-of-tolerance) data and establish optimal calibration intervals for manufacturer/models, groups or classes of measuring equipment.
	Our Method A3 Interval Tester freeware analyzes user specified information about the number of tests/calibrations conducted at the current interval into the number of in-tolerances observed. An algorithm, based on Method A3 documented in NCSLI RP-1, is used to compare the observed and target/desired reliabilities. If a significant difference is determined, then a new/revised calibration interval is recommended. IntervalMAX also utilizes Method A3 when insufficient calibration history data are available for reliability modeling.
Is SPCView difficult to use?	No. SPCView provides considerable versatility and analytical power through the utilization of drill-down screens and worksheets that are designed to facilitate data analysis. In addition, SPCView has a full on-screen Help function and comes with a comprehensive user manual.
What reports can I generate with SPCView?	SPCView has a variety of reporting levels, including summary reports and "drill-down" reports for complete communication of the analysis results. Reports include process metrics, historical data, control chart, curve fit statistics, trend projection plot and intervals analysis results. Interval analysis results and trend plots can also be captured in the Windows clipboard for pasting in word processing, spreadsheet or other applications.
How does SPCView compare to software offered by other companies?	Currently, no other SPC software product focuses on the statistical analysis and control of measurement processes or the application of measurement uncertainties in the establishment and evaluation of process trends.
Has SPCView been validated?	Currently, there are no standards or guidelines for testing and validating statistical process control software. However, there are many common-sense protocols that ISG applies, some of which are summarized below.
	Validation of mathematical and statistical methods. ISG routinely publishes papers and articles that clearly describe the mathematical and statistical concepts that are

SPCView FAQs

© 2010 Integrated Sciences Group, All Rights Reserved.

Question	Answer

incorporated in our software products. This serves two purposes:

1. It shows that we have an unsurpassed technical understanding of statistical measurement process control concepts and principles.
2. The information can be reviewed and scrutinized in the public domain.

Verification of numerical approximations and calculations.
Depending upon the sophistication of the numerical algorithms, our program calculations are verified via hand calculations, Excel spreadsheets, or math and statistics applications such as MathCAD. Verification of numerical algorithms are achieved in a number of ways including:

1. Extensive alpha testing via internal peer review and verification.
2. Vigorous beta testing via external review and verification by selected customer base.
3. Widespread peer review and verification via distribution of freeware subprograms and applets.
4. Large-scale customer use and feedback over the past 15+ years.

Verification of program functionality.
Another important aspect of our software validation is the verification that the program screens, templates, or worksheets function as intended and that data entered into drill-down screens are properly stored and transferred to other screens as needed. Our protocol for testing and validating program functionality is the same as described for numerical algorithms.

Note: When software validation is of primary concern, we provide customers with specific validation reports upon request.

Question	Answer
Will SPCView run on the Windows 7, Vista, Macintosh or Linux operating systems?	SPCView is a 32-bit Windows-based application. Therefore, it will run on the 32-bit editions of the Windows 7 and Vista operating systems. The Microsoft WOW64 emulator also allows 32-bit applications to run seamlessly

SPCView FAQs

Question	Answer
	on the 64-bit editions of these operating systems.
	SPCView does not run on the Macintosh or Linux operating systems. However, it will run on Macintosh or Linux operating systems running a PC emulator program without any degradation in functionality.
What kind of technical support can I expect to receive?	Technical support is a major consideration for many software users, especially when using a specialized analysis program. Registered users of SPCView have access to free technical support (via phone, fax and email) from professionals with established statistical measurement process analysis and control expertise.
Why should I purchase statistical process control software from ISG?	Since ISG has been a major pioneer in developing measurement science analytical methodology over the past 30 years, our software products embody the most advanced tools and methods available.
	Our state-of-the-art software products not only comply with ISO standards and guidelines, they also incorporate several ground-breaking measurement uncertainty analysis methods and techniques developed and published by ISG personnel.
	Our commitment to product excellence is epitomized by an unmatched level of software maintenance and support. Unlike other companies, we continually strive to improve the functionality of our software by including customer suggested new features or enhancements as part of our free service updates.