Minitab 15
Statistical Software ™

Find Out What's New >>

With nearly 50 enhancements that increase functionality and ease-of-use, Minitab® 15 has something for everyone.

And the benefits are immediate – minimal changes to the interface allow you and your teams to access these

improvements without having to re-learn the software or update your training and support materials.

Minitab® 15
gives you more of what you need.

The Top 15 Enhancements

Complete List of What's New

The Top 15 Enhancements in Minitab® 15

1 **Assign formulas to columns in the worksheet; columns update when data in the worksheets change.** One of our most frequently requested features, linking formulas to columns or constants not only saves time, but also makes Minitab even easier for users who are accustomed to using spreadsheet software.
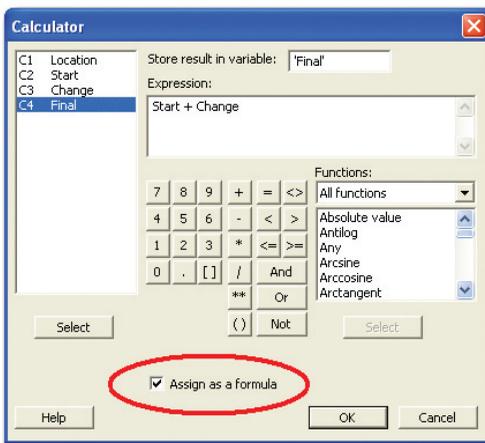
Specify formulas in the Calculator, from the Editor menu, or by right-clicking in the Data window.

2 **Multiple Undo/Redo in Data window.** Undo mistakes and redo changes in the Data window. In prior releases, you could undo/redo one step back. In Minitab 15 you can undo/redo multiple steps back.

3 **Enhanced calculations capabilities.** Minitab 15 includes more than 40 new calculator functions, including 23 for manipulating text. New workday, weekend, and holiday designations help you with elapsed time calculations. Percentiles and the geometric mean can now be calculated as well.

Suppose you have a column of start dates and a column of end dates. You can use the Calculator to compute the number of elapsed business days (excluding weekends and holidays).

Suppose you have imported employee names from a database that are formatted LASTNAME FIRSTNAME but you only need the employees' last names. You can use the Calculator to extract the last names and place them in a new column.

3

4 **New Currency and Percentage formats for data**. Minitab now displays currency and percentage symbols on data in the Data window, on graphs, and output tables.
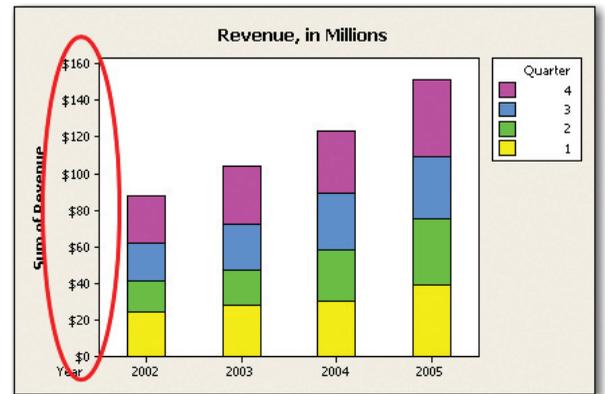
5 **Password protection for project files.**Password protect Minitab project files for added security.

6 **Power (OC) curves for power and sample size**. New graphs help you examine the prospective sample space and choose the optimal sample size, with the desired power and detection goal.

7 **Easily generate your Gage R&R worksheet**. Generate a data collection worksheet based on your specific Gage R&R study.

8 **Type 1 Gage Study.** Evaluate the bias, repeatability, and capability of your measurement system on a single part.
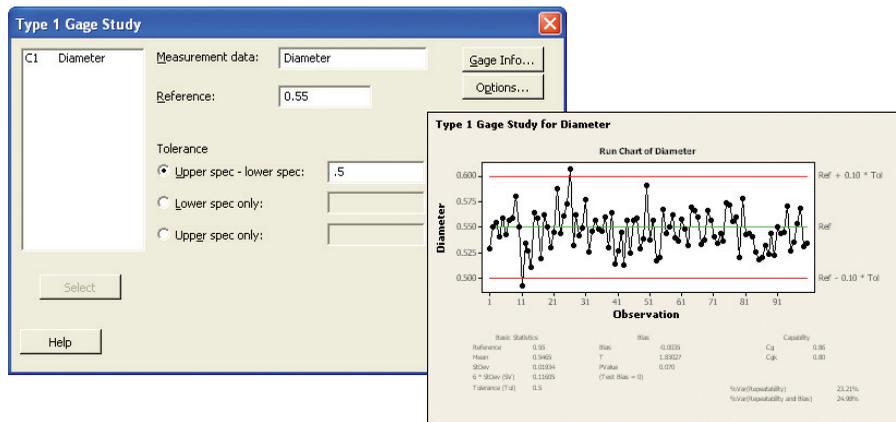
9 **Gage R&R: Probability of a False Answer.** Examine the probability of passing a defective product (consumer's risk) or of failing a good product (producer's risk).
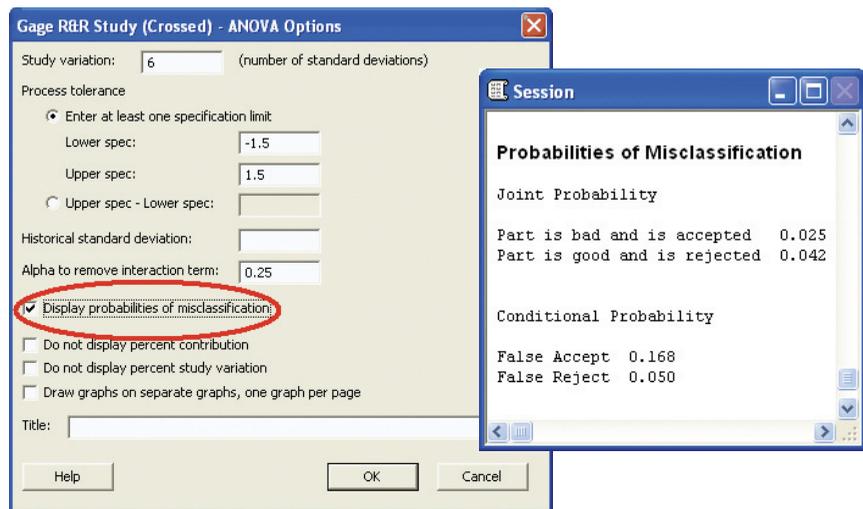
10 **Acceptance Sampling.** Use this new method to help answer the question, "How many units should I test before deciding whether to accept or reject delivered materials?" You can use Acceptance Sampling with either attributes or variables data.
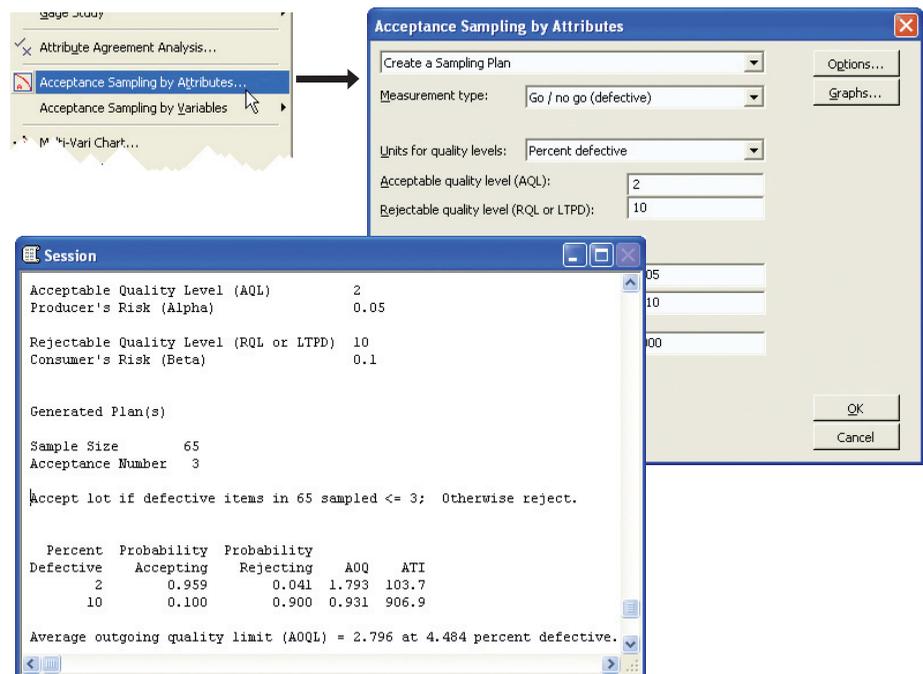
11 **Optimal general factorial designs**. Select an optimal design to reduce the number of experimental runs in a general full factorial design, or to evaluate or improve the optimality of an existing general factorial design.
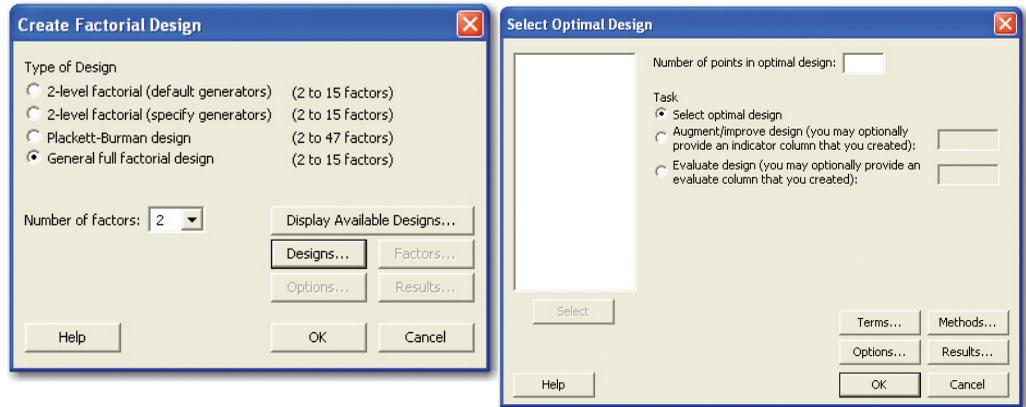
12 **Probability Distribution Plot**. View the shape of a distribution, visually compare two distributions, or display the shapes of a distribution with varying parameters. In addition, you can view the area under a distribution curve that corresponds to either a given probability or x value. This new plot is a useful visualization tool for teaching as well as for applied analysis.

Vary parameters

View probabilities

Compare two distributions
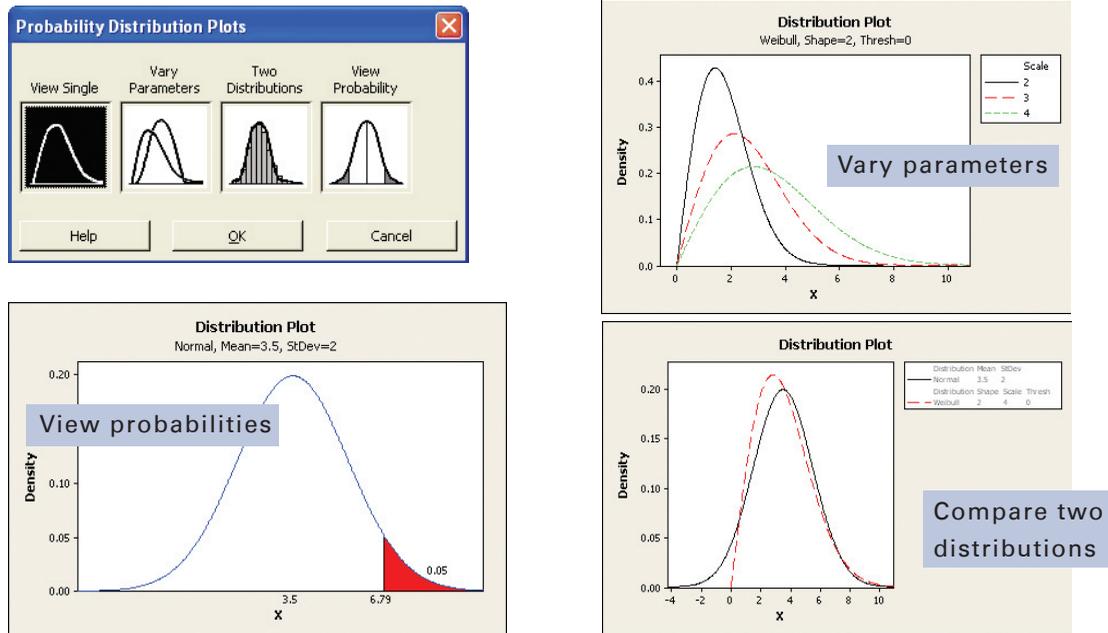
13 **Warranty Analysis**. New reliability methods allow you to forecast future warranty claims or returns based on current warranty data.
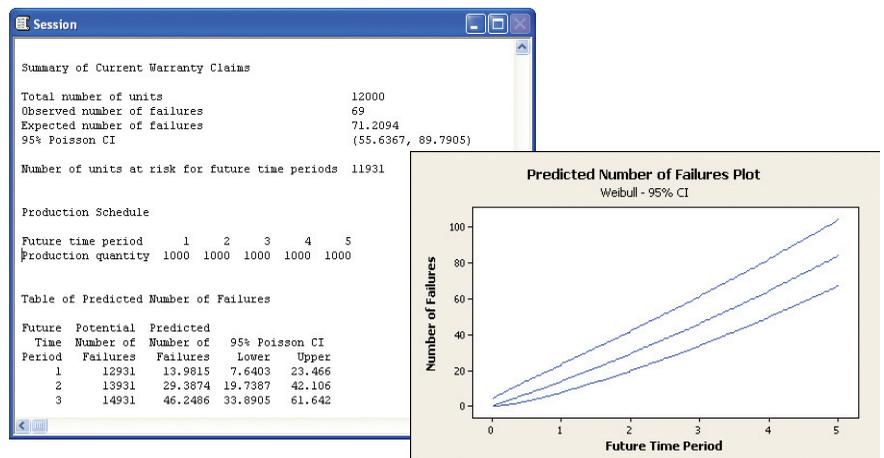
14 **Powerful customization capabilities**: Use MyMenu to customize Minitab's interface, for example, to create dialog boxes that run macros that your company has created. Use Minitab Automation to integrate Minitab COM objects into your specialized applications, making Minitab a powerful statistical and graphical engine.

MyMenu can be used to create and call customized dialogs.
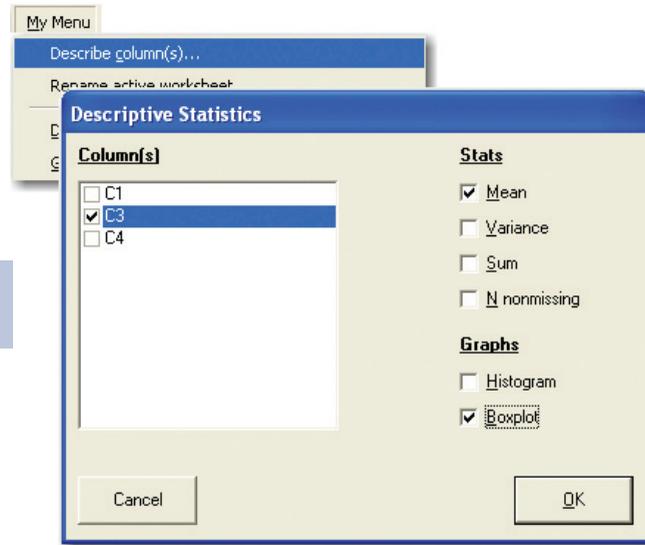
15 **Improved Glossary**. With many new definitions added, the Minitab 15 Glossary now includes 526 definitions, written in a practical, easy-to-understand way.
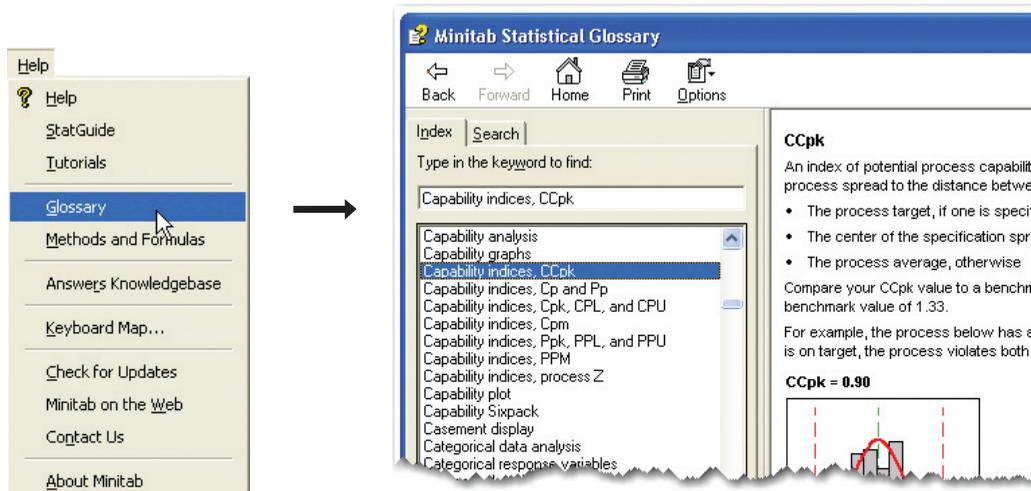
Calculations

New calculator functions. Minitab 15 includes more than 40 new calculator functions, including 23 for manipulating text. New workday, weekend, and holiday designations help you with elapsed time calculations. Percentiles and the geometric mean can now be calculated as well.

Two new distributions: Geometric and Negative Binomial. Minitab 15 adds the Geometric distribution, useful when you want to evaluate how many trials (or samples) are needed to find the first event (such as a defect). The Negative Binomial distribution is useful when you want to evaluate how many samples are needed to find the kth defect.

New workday/weekend/holiday designations. You can now take weekends and holidays into account when generating a patterned sequence of date values using workdays as the increment.

Data and Data Window

Assign formulas to columns. One of our most frequently requested features, linking formulas to variables not only saves time, but also makes Minitab even easier for users who are accustomed to using spreadsheet software.

New date/time formats and capabilities. Minitab recognizes date formats that include the entire month name, commas and other separators, two parts (without the year), and other variations of these formats based on the Regional and Language Options in the Windows Control Panel. Minitab can track time to the tenths or thousandths of seconds. Minitab can also calculate elapsed time (duration, delta time) in hours, minutes, or seconds.

New formats for currency and percentage columns. You can specify the currency symbol and negative number indicator, and the decimal places for both. Minitab now displays currency and percentage symbols on data in the Data window, on graphs, and output tables.

Multiple Undo/Redo in Data window. Undo mistakes and redo changes in the Data window. In prior releases, you could undo/redo one step back. In Minitab 15 you can undo/redo multiple steps back.

File I/O

Password protection for project files. You can Password protect Minitab project files for added security.

More import/export file formats. Minitab can open and save files in two new formats: Comma-separated values (.CSV), and Microsoft Excel's Spreadsheet XML (.XML).

Quick and easy copying and pasting from Excel. Minitab can better recognize numeric and date/time data pasted from Excel and other Microsoft Office programs.

Sample Data folder link. Minitab provides a direct link to all sample datasets from within the Open Worksheet dialog.

Graphs

Line Plot. Line Plots compare response patterns for two or more groups . You can use a Line Plot to check for consistency in responses or to look for interactions.
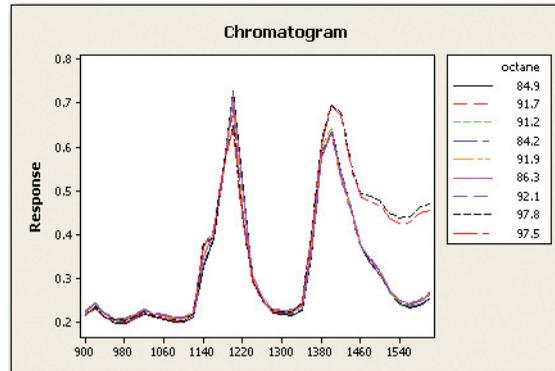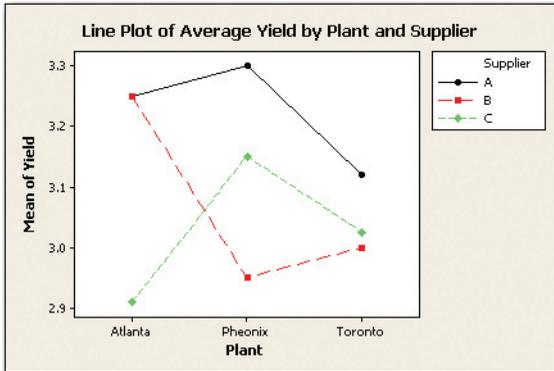
Probability Distribution Plot. View the shape of a distribution, visually compare two distributions, or display the shapes of a distribution with varying parameters. In addition, you can view the area under a distribution curve that corresponds to either a given probability or x value. This new plot is a useful visualization tool for teaching as well as for applied analysis.

Enhanced Individual Value Plot. New option allows better arrangement of overlapping points, which makes data patterns easier to see and interpret.
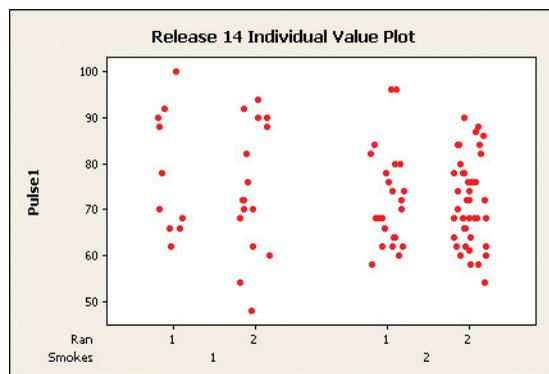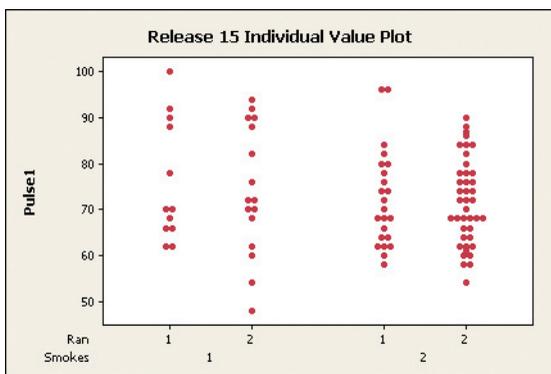
Enhancements to graphs. Graph enhancements include: More color choices; More information in graph tooltips; Spectrum colors for contour plots; New smoothing default for non-DOE contour and surface plots; New option for stacking order in stacked bar charts; Easier editing of reference line, percentile line, and pie chart labels; Easier to display or hide multi-level axis labels for several graphs including time series plots and charts; New option for specifying display attributes (such as bar colors), for charts and boxplots, by the graph variables (the Y's).

More graph file format choices for ReportPad™. In prior releases, if you copied many graphs (for example, 200 graphs) into the ReportPad, your Minitab Project File would become quite large and could slow performance. A new option allows you to paste graphs into the ReportPad so that you can still have many graphs but the file will not get too large.

Basic Statistics

Poisson rate inference. Data that often follow a Poisson distribution include the number of calls to a service center and the number of defects in a length of wire. If you have Poisson data, you can calculate confidence intervals, and conduct one- and two-sample hypothesis tests.

One-sample variance test. Conduct a hypothesis test to determine whether the population variance equals a specified value, and calculate a confidence interval for the population variance and standard deviation.

Mode. Display the mode(s) of a variable.

Design of Experiments

Optimal general factorial designs. Select an optimal design to reduce the number of experimental runs in a general full factorial design, or to evaluate or improve optimality of an existing general factorial design.

Enhanced optimization plot. Improvements include: Faster and more accurate optimizer; More graph editing capabilities; Convenient right-click editing menu; Ability to find the exact scale coordinate anywhere on the data region using crosshairs.

More factors for response surface designs. Central Composite designs can have 2 to 10 factors. Box-Behnken designs can have 3, 4, 5, 6, 7, 9, or 10 factors.

Half normal plot of effects. Compare the relative importance of effects by viewing their distances from the fitted line. In a half normal plot, all significant effects are together on the right.

Control Charts

Edit individual symbols. Edit individual symbols on control charts.

Separate LCL, UCL and center line labels for different stages. Display control limit and center line values for all stages.

Preference for control charts data representation. Save your preferences for symbols and various lines as defaults for all control charts.

Quality Tools: Gage R&R Enhancements

Easily generate your Gage R&R worksheet. Generate a data collection worksheet based on your specific Gage R&R study.

Type 1 Gage Study. Evaluate the bias, repeatability, and capability of your measurement process on a single part.

Gage R&R: Probability of a False Answer. Examine the probability of passing a defective product (consumer's risk) or of failing a good product (producer's risk).

Quality Tools: Acceptance Sampling. Use this new method to help answer the question, "How many units should I test before deciding whether to accept or reject delivered materials?" You can use Acceptance Sampling with either attributes or variables data.

Quality Tools: Johnson Transformation. Added the ability to do a Johnson transformation directly from within the Stat > Quality Tools > Individual Distribution ID Plot dialog box. Now, all of the tools for handling non normal data are available in one convenient location.

Quality Tools: New Capability Analysis options. Minitab now lets you specify different unbiasing constants options for overall and within subgroup standard deviations. Most users prefer to use the unbiasing constants to estimate the within standard deviation, but not to use the unbiasing constants to estimate the overall standard deviation.

Reliability Analysis

Warranty prediction. Forecast future warranty claims or returns based on current warranty data.

Warranty data pre-processor. Process raw field data into a regular time-to-failure data format in order to run any life data analysis.

Multivariate Analysis

Cronbach's Alpha. Use to measure the consistency or reliability of a set of items (in a survey or test) that assesses the same quality, skill, or characteristic.

Biplot for principal components and factor analyses. New built-in graph for Principal Components Analysis and Factor Analysis displays an overlay of the score and loading plots.

Power and Sample Size

Power (OC) curves for power and sample size. New graphs help you examine the prospective sample space and choose the optimal sample size, with the desired power and detection goal.

Time Series

High-resolution cross correlation function. Compute and plot the cross correlations between two time series, which can be useful in determining if a series of data leads another series and by how many time periods, or lags.

Regression

Easier way to create indicator variables. The new Make Indicator Variables command makes it easy to create indicator variables for regression analysis.

Documentation

Improved Help on Methods and Formulas: Minitab 15 includes enhanced information on the methods and formulas used in Minitab statistical procedures.

Improved Glossary. With many new definitions added, the Minitab 15 Glossary now includes 526 definitions, written in a practical, easy-to-understand way.

Improved StatGuide™. StatGuide, which explains and helps you interpret output, is now available for basic graphs.

More practice data sets. Several new data sets have been added, and even more have been expanded to provide all the data you need to practice along with Help examples.

Customization

Minitab Automation. Make Minitab the statistical engine behind all of your corporate applications. Our COM objects allow your programmers to utilize Minitab's quality analyses and graphs in your desktop and web applications, delivering Minitab-validated output where and when you need it. Create regular Minitab reports from a database, perform Minitab analyses, create and save Minitab worksheets, and more, all automatically, by integrating Minitab COM objects into your specialized applications.

MyMenu. My Menu allows your programmers to customize Minitab. Use it to add specialized functionality to the Minitab menu, including customized interfaces to corporate databases, company-created macros, and specialized reports. Together with Minitab's new COM objects, My Menu allows you to create a Minitab that's tailored to the way your company works.

Installation

Update Services. Minitab includes a convenient way to automatically download and install maintenance updates, as soon as they are available. Customers with multi-user licenses can, if they wish, disable the updates for end users.

Minitab ™

QUALITY. ANALYSIS. RESULTS.