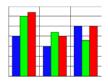
# C

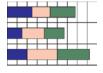
# **Chart Types Quick Reference**

# 2-D Business Charts



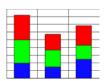
#### Column

Use a Column chart to compare one item to another or to compare different items over a period of time. Column charts effectively show dramatic changes from one category to another.



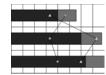
#### Stacked Bar

Use a Stacked Bar chart to show how all categories in a series compare over time or to compare parts to the total.



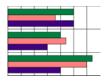
#### Stacked Column

Use a Stacked Column chart to compare parts to the total or to show how components of an item change over time.



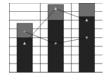
# Stacked Bar with Line Overlay

Use a Stacked Bar with Line Overlay chart to compare parts to the total or to show how components of an item change over time. The line overlay shows the trend of one or more items over a period of time or number of events



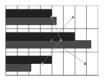
#### Bar

Use a Bar chart to compare sizes and amounts or to emphasize differences between items, usually at the same point in time.



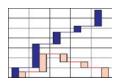
# Stacked Column with Line Overlay

Use a Stacked Column with Line Overlay chart to compare parts to the total or to show how components of an item change over time. The line overlay shows the trend of one or more items over a period of time or number of events.



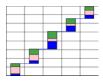
## Bar With Line Overlay

Use a Bar with Line Overlay chart to compare sizes and amounts or to emphasize differences between items, usually at the same point in time. The line overlay shows the trend of one or more items over a period of time or number of events.



### Build-Up

Use a Build-Up chart to show components that build up to a total over time or make up a whole.



## Stacked Build-Up

Use a Stacked Build-Up chart to show groups of components that build up to a total over time or make up a whole.



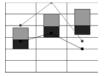
# Floating Bar

Use a Floating Bar chart to compare ranges of data among series and categories.



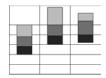
### Floating Column

Use a Floating Column chart to compare ranges of data among series and categories.



# Floating Stacked Bar

Use a Floating Stacked Bar chart to specify ranges of data in bar format and to compare parts to the total or to show how components of an item change over time.



# Floating Stacked Column

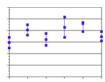
Use a Floating Stacked Column chart to specify ranges of data in column format and to compare parts to the total or to show how components of an item change over time.

# Floating Stacked Bar with Line Overlay

Use a Floating Stacked Bar with Line Overlay chart to compare parts to the total or to show how components of an item change over time. Specify the lowest and highest value for each bar. This results in bars that "float" (not attached to the category axis). The line overlay shows the trend of one or more items over a period of time or a number of events.

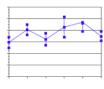
## Floating Stacked Column with Line Overlay

Use a Floating Stacked Column with Line Overlay chart to compare parts to the total or to show how components of an item change over time. Specify the lowest and highest value for each column. This results in columns that "float" (not attached to the category axis). The line overlay shows the trend of one or more items over a period of time or a number of events.



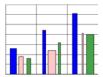
# High-Low

Use a High-Low chart to show the highs and lows for different items or different periods of time.



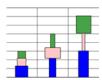
### Range

A Range chart shows the highs and lows of an item, as well as the midpoints between the two. You can make these comparisons over time.



# Column Segmentation

Use a Column Segmentation chart much like a Column chart but with a second value for each series that results in width, allowing you to compare two variables for each column.



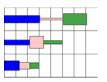
# Stacked Column Segmentation

Use a Stacked Column Segmentation chart to compare two values for groups of data that combine to form totals in categories.



# Bar Segmentation

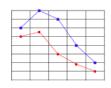
Use a Bar Segmentation chart much like a Bar chart but with a second value for



#### each series that results in width, allowing you to compare two variables for each bar.

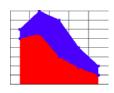
# Stacked Bar Segmentation

Use a Stacked Column Segmentation chart to compare two values for groups of data that combine to form totals in categories.



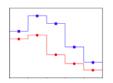
#### I ine

Use a Line chart to show the trend of one or more items over a period of time or number of events. Line charts are best for plotting a long series of data points.



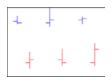
#### Line Fill

A variation of a Line chart, using a fill below the data series line. To create a fill, use the "Fill Below Line" option in the "Options" dialog box.



### Step

Use a Step chart to compare items that do not show a trend. Step charts display discrete points along the value axis, with vertical lines showing the difference between each point.



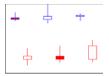
## Open High Low Close

Use an Open High Low Close chart to show values that fluctuate within a given time period, such as a day or hour.



# Spider

Use a Spider chart to show multiple variables, such as performance levels, ratings in different areas, or progress.



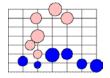
#### Candlestick

Use a Candlestick chart to show whether the open or close activity has increased or decreased within the bounds of the highs and lows for different items or different periods of time. This chart is similar to the Open High Low Close chart.



#### Radar

A Radar chart is a variation of a Spider chart. To create a Radar chart, turn off the "Show Fill" and "Show Axes/Ticks" and turn on the "Radius Major" options in the "Options" dialog box.



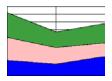
#### Bubble

Use a Bubble chart to show a visual comparison using three values.



#### Pie

Use a Pie chart to show the relationship of parts to the whole.



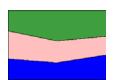
# Area

Use an Area chart to emphasize the volume or size of a data series, over time.



#### Donut

A Donut chart is a variation of a Pie chart with a hole in the middle. To create a Donut chart, use the "Donut" option in the "Options" dialog box.



#### Area Percent

An Area Percent chart is a variation of an Area chart with the data series appearing as a percentage of the whole. To create an Area Percent chart, use the "Percentage" option in the "Options" dialog box.



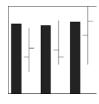
#### Stacked Pie

Use a Stacked Pie chart to show the relationship of the parts to the whole for two or more data series.



#### Multiple Pie

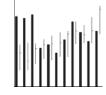
Use a Multiple Pie chart to show the relationship of the parts to the whole for two or more data series.



# Plot Survey Groundtreaking Build Out Architectural Design Exterior Building Equipment Installation 9/1/2001 12/1/2001 3/1/2002 6/1/2002 9/1/2002 12/1/2002

#### Time Line

Use a Time Line chart to display a project schedule, time line, or even a product comparison based on a predetermined scale.



| Temperatures | High | Low | Median |
|--------------|------|-----|--------|
| Jan-Feb      | 68   | 50  | 59     |
| Mar-Apr      | 75   | 54  | 64.5   |
| May-Jun      | 90   | 72  | 81     |
| Jul-Aug      | 103  | 68  | 85.5   |
| Sep-Oct      | 92   | 78  | 81     |

#### **Table**

Use a Table chart to show chart data as it appears in the Data page.

# Volume High Low Close

Volume Open High

Use a Volume Open High

Low Close chart to show

values that fluctuate in a given time period, such as a day or hour. You can plot the total volume, starting value (open), the high, the low, and the final (close) values.

Low Close

This chart is similar to the Volume Open High Low Close chart except that it does not use the second column of data, the open values are not represented, and the corresponding second column in every series should be left empty.

# 2-D Technical Charts



### **Paired Scatter**

Use a Paired Scatter chart to show data points from one or more data series, each point having unique X and Y coordinates. This chart is similar to the Paired XY Line chart in the way the data is organized, but the Paired Scatter chart does not sort the X values before plotting the data.



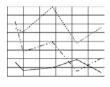
## Paired Intensity Scatter

Use a Paired Intensity Scatter chart to show data points from one or more data series with each point having unique X and Y coordinates. "Paired" refers to how the chart interprets the data that makes up each series of X and Y coordinates.



#### Paired XY Line

Use a Paired XY Line chart to show sorted data points from one or more data series with unique X and Y coordinates, "Paired" refers to how the chart interprets the data that makes up each series of X and Y coordinates.



#### XY I ine

Use an XY Line chart to show a comparison of one or more data series, each having the same X coordinate and unique Y coordinates. This chart is similar to the Scatter chart in the way the data is organized, but the XY Line chart sorts the X values from left to right before plotting the data.



#### Scatter

Use a Scatter chart to show data points from one or more data series, each point having the same X coordinate and unique Y coordinates. This chart is similar to the XY Line chart in the way the data is organized, but the Scatter chart does not sort the X values plotting the data. The number of rows determines how many points are in a data series.



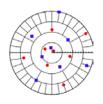
#### XY Column

Use an XY Column chart in much the same way as a Scatter chart. Create columns by filling the area below and to the left of each XY data point.



# Intensity Scatter

Use an Intensity Scatter chart to show data points from one or more data series with each point having the same X coordinate and unique Y coordinates plus a Z-axis intensity value. The number of rows determines how many points are in a data series.



#### Polar

Use a Polar chart to show relationships between angles measured in degrees and some other quantity.



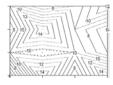
### Ternary

Use a Ternary chart to show the percentage of a whole based on three parts of information.



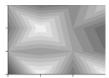
### Ternary Percent

Use a Ternary Percent chart to show the percentage of a whole based on three parts of information, two of which are data in percentage form.



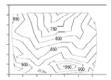
#### **Contour Line**

The Contour Line chart is a variation of the Contour Fill and 3-D Surface Line/Fill charts. A Contour Line chart does not have a value axis; the values are shown as a series of lines and numbers within the chart instead.



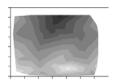
#### Contour Fill

Use a Contour Fill chart to show surface variation based on two sets of evenly spaced values (such as latitude and longitude at 10° intervals), which can be entered as row and category labels, and a unique number (such as elevation at a given point).



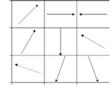
#### XYZ Contour Line

Use an XYZ Contour Line chart to show variations and relationships over three sets of values: latitude, longitude, and elevation.



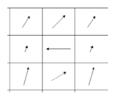
#### XYZ Contour Fill

Use an XYZ Contour Fill chart to show variations and relationships over three sets of values: latitude, longitude, and elevation.



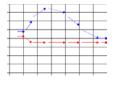
#### **Gridded Vector**

Use a Gridded Vector chart to display a direction (like air flow) using vectors (arrows) over a gridded area.



#### R/A Gridded Vector

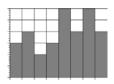
Use a Radius/Angle Gridded Vector (R/A Gridded Vector) chart to show direction (such as airflow) using vectors (arrows) over a gridded area.



#### XY Vector

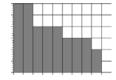
Use an XY Vector chart to display a direction (such as airflow) using vectors and a magnitude (dependent upon the endpoint calculation method).

# 2-D Statistical Charts



#### Histogram

Use a Histogram chart to show the frequency or occurrence of selected data in a specified range.



#### Pareto

Use a Pareto chart to show data that need to be counted and sorted.



# Ogive

Use an Ogive chart to show the running sum of frequency counts.



#### **Box Plot**

Use a Box Plot chart to show the "spread" of data between categories. Statistics are computed to reduce the

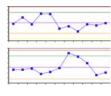


amount of information displayed while still showing the distribution of data in each category.

#### Survival Chart

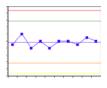
Use a Survival chart to show the decay of a variable based on an independent variable (typically time).

# **Quality Control Charts**



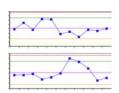
# $\overline{X}$ -R (X Bar-R)

The  $\overline{X}$ -R chart uses measured values in each subgroup to compute the average value and the range of the data.



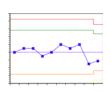
#### Number of Defectives

The Number of Defectives (pn) chart shows the number of defective items in each subgroup. All subgroups must have the same number of members.



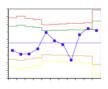
# $\overline{X}$ -S (X Bar-S)

The  $\overline{X}$ -S chart is similar to the  $\overline{X}$ -R chart except the standard deviation is plotted. This chart is more appropriate when the set of measured values is greater than 10.



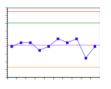
#### **Defects Per Unit**

The Defects Per Unit (u) chart shows the number of independent defects per unit. Use this chart if there may be many defects. Subgroups can vary or be constant.



### **Fraction Defective**

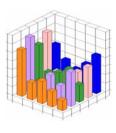
The Fraction Defective (p) chart shows the fraction of defective items in each measured subgroup. Data are shown as subgroup sizes and defectives are represented as percentages.



#### Number of Defects

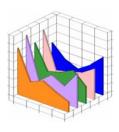
The Number of Defects (c) chart shows the number of defects within a subgroup. The subgroup sizes are constant.

# 3-D Business Charts



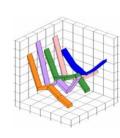
#### 3-D Column

Use the 3-D Column chart to compare one item to another or to compare different items over a period of time. Column charts effectively show dramatic changes from one category to another.



#### 3-D Area

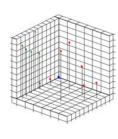
Use a 3-D Area chart to emphasize the volume or size of a data series, frequently over time. This chart is a variation of a 2-D Line or Area chart.



#### 3-D Ribbon

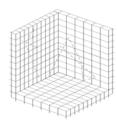
Use a 3-D Ribbon chart to show trends. This chart is a variation of a 2-D Line chart.

# 3-D Technical Charts



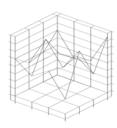
## 3-D Scatter

Use the 3-D Scatter chart to plot data points created by the intersection of three different coordinate values. The points are connected to one of the chart planes with a drop line. Each of the three values that make up a point corresponds to a particular axis in a 3-D grid.



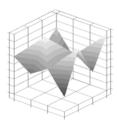
#### 3-D Scatterline

The 3-D Scatterline chart is a variation of the 3-D Scatter chart, except that it connects the data points by a line, as in "connect-the-dots." This chart measures something that moves in space as a function of time: a satellite orbiting earth, for example. The chart shows a path of contact points along an implied time line represented by the position of the points along the line.



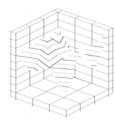
#### 3-D Wireframe

Use a 3-D Wireframe chart to show three-dimensional changes in an object or over time. It is a variation of a Contour chart.



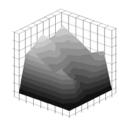
#### 3-D Surface Fill

Use a 3-D Surface Fill chart to show surface variation based on two evenly spaced values (such as latitude and longitude at 10° intervals), which can be entered as row and category labels, and a unique number (such as elevation at a given point).



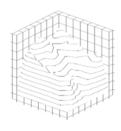
#### 3-D Surface Line

Use a 3-D Surface Line chart to show surface variation based on two evenly spaced values (such as latitude and longitude at 10° intervals), which can be entered as row and category labels, and a unique number (such as elevation at a given point).



#### 3-D XYZ Surface Fill

Use a 3-D XYZ Surface Fill chart to show three dimensional data in which one quantity (plotted on the Z axis) varies depending on X and Y values. XYZ data are not evenly incremented like Surface Line or Fill data.



#### 3-D XYZ Surface Line

Use a 3-D XYZ Surface Line chart to show three dimensional data in which one quantity (plotted on the Z axis) varies depending on X and Y values. XYZ data are not evenly incremented like Surface Line or Fill data.

# **Text Charts**



## **Organizational**

Use an Organizational chart to show hierarchy, such as rank in a company.



### Bullet

Use a Bullet chart to show a subject outline for points of discussion.