

Demo: Customizing Graphics

In this video, you learn how to customize graphics in Graph Builder with the file Process Yield.jmp. You see how to change titles and labels, change axes, add reference lines, customize legends, change colors, and annotate graphs.

This example involves the average monthly yield for two manufacturing processes, both before and after changing the supplier.

To start, we select Graph Builder from the Graph menu. Because we have time-ordered data, we'll create a run chart.

To do this, we drag Month to the X zone, drag both Process 1 and Process 2 (at the same time) to the Y zone, and click the Line icon.

This creates run charts for both processes. Finally, we'll click Done to close the control panel.

The percent yield is plotted on the Y axis, so we'll click the Y-axis label and change it to % Yield.

We'll also change the graph title to something more descriptive. To do this, we click the title and then enter the new name. We'll title this graph Average % Yield.

The supplier was changed in July. We want to emphasize this change in the graph. We'll add a reference line to note when this change occurred.

To do this, we double-click the X axis. The axis labels are assigned values for sequencing. The first value, Jan, is zero. July is the sixth value. To add a reference line for July, we enter 6 in the Value field. We'll change the color and the line style, and click Add. You can see what this reference line will look like in the preview pane at the bottom.

To make this change stand out even more, we'll add shading for the period from July through December. To do this, we select Allow Ranges, enter 6 and 12 in the Min Value and Max Value fields, change the color to light gray, and click Add.

Let's make a few more changes while we're here.

The data are for January through December 2018. We'll add 2018 to the end of the value labels for Jan through Dec. This is a convenient way to document the time frame for the data directly on the graph.

We'll click OK to accept these changes.

You can see the changes we just made. We added a reference line at July, added shading from July through December, and changed the axis labels for January and December to note the year.

To make the supplier change stand out, we'll add an annotation to the graph.

To do this, we click the Annotate icon from the toolbar, and click in the graph. We'll add this annotation: July: New Raw Material Supplier.

Finally, let's change the lines to make it easier to distinguish the lines for the two processes. We'll right-click the legend for Process 2, give it a thicker line width, and change the line style to dashed.

We'll also change the line thickness for the line for Process 1. But we'll keep this a solid line.

Here is our final, customized graph with all of the details needed to interpret the run charts for the two processes before and after changing the supplier.

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