## A graphical picture of process output

**Technology** 



A scatter diagram is constructed by plotting the values of one variable on the horizontal axis, and the corresponding value of the other variable on the vertical axis. The strength of the relationship is determined by the variability of the cluster of points relative to a mathematical expression describing the association.

## Run Chart

A run chart is a time-ordered chart, that is, individual measurements are plotted in the order in which they occur, and then connecting the points for ease in interpretation. It is best used to identify sustained shifts or trends in the process average.

## **Control Chart**

A control chart is a run chart with control limits. These limits represent the maximum and minimum allowable values for any individual plotted point. Any point that exceeds these limits provides statistical evidence that the process average has changed and that the chart's centerline is no longer a reliable approximation. Thus, a control chart tests the statistical stability of the process.