Run Charts

A run chart is a graph for visualizing process data plotted over time. It displays data points connected by a line showing the pattern of process measurements in chronological order.

Key elements include:

- The x-axis shows a uniform time scale such as days, weeks, months, etc.
- The y-axis plots the process metric being tracked such as defects, cycle time, yield, etc.
- Each data point represents an individual measurement at a distinct time.
- The points are connected in sequential order to show the process performance trend.

Patterns to look for in run charts that signal special cause variation needing attention:

- Shifts - consistent increase or decrease in the measurements
- Trends - sustained slope upwards or downwards over time
- Runs - data consecutively above or below the average center line
- Repeating cycles - regular predictable peaks and valleys

Benefits of using run charts for analysis:

- Visualize patterns in process data over time
- Identify stability and variation
- Detect significant changes needing investigation
- Track improvement initiative impacts
- Communicate performance trends

Run charts provide a simple graphical tool to monitor process metrics and view analysis results. The visual format makes trends easy to absorb. They help assess process health.