MOVING AVERAGE

The Moving Average feature is another statistical way to evaluate a stream of parts. This statistical technique smoothes out the data reducing the effects of spikes caused from measurement error or other variables. A data spike can trigger an unwanted reaction. Figure 1 shows a Moving Average chart.

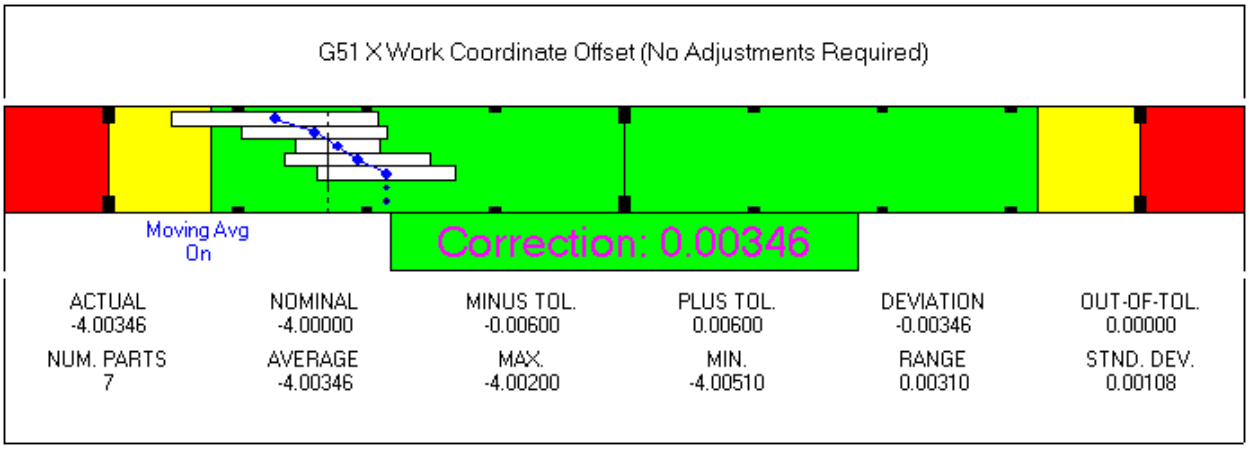

Figure 1

The chart resembles a typical stats information chart. The white bar representing the dimension deviation to the average is replaced with moving average information. A blue dot representing the moving average location and a white bar showing the range of the moving average subgroup is plotted. The moving average value is computed by averaging a small number of parts (in this example 3). Using the FIFO method (first in first out) the old part drops from the subgroup and the next part enters maintaining the subgroup size. The average (blue dot) and range (white bar) for the subgroup is plotted.

Triggering a Reaction

What triggers a reaction is the moving average not an individual dimension. Looking at the chart in figure 1 you will notice the range (white bar) of the last subgroup falls in the percent of tolerance area. Using this technique the percent of tolerance reaction was not triggered since the moving average (blue dot) is still in the green area.

To turn on the moving average feature perform the normal sequence of commands to compute the stats information analysis. Set the variable "RpmVar.MovingAvgCnt" to a value greater than 0. The number represents the subgroup size.