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Statistical process control implies an effective combination of theory and practice. The theory mainly involves quality control charts that are based on statistical principles and detect systematic process deviations. Quality control charts separate these kinds of deviations from the "normal" process behaviour.

In practice, quality control charts provide the probability of required corrective actions and visualise the success of such action. This is due to properly selected subgroup sizes, subgroup frequencies and statistical basics.

1. To control the process location of a characteristic based on a quality control chart, the characteristic has to be quality-assured but not necessarily stable.

2. We typically apply quality control charts to identify the process model in a preliminary process analysis. This model helps you select and calculate the final control chart used in long-term analysis.

3. VDA applies an error probaility of α = 1% to calculate a quality control chart whereas AIAG defines α = 0.27%. The difference is that the higher error probability as demanded by VDA is more likely to detect process variations.

4. We apply two-track quality control charts to control continuous characteristics, since the location and variation of a characteristic might change independently. It is thus reasonable to track both separately.