

# Using Statistical Thinking and Designed Experiments to Understand Process Operation

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## Abstract

Using a series of four case studies, this article illustrates the effective integration of statistical process control and designed experiments. For such an integration to be effective, this article also stresses the need for understanding statistical process control (SPC) as a tool for active process study, rather than simply as a method for maintaining and controlling processes. The use of SPC in this fashion is also illustrated throughout the case studies.