

## **Book review**

Mittag, H. J.: *Qualitätsregelkarten*. Carl Hanser Verlag, München 1993. X+250pp.

This book addresses itself to practitioners and to all those who want to have an overview — together with the corresponding statistical background — on control charts applied most frequently in process control. Furthermore, EWMA (Exponentially Weighted Moving Average) charts are discussed and recommended for industrial practice, capability indices are introduced, multivariate approaches are mentioned and errors in the variables are considered, a topic which is far too often neglected in other books on quality control.

The sections of the book are:

1. Introduction
2. Control Charts in Process Control
3. Controlling the Mean of a Process
4. Controlling the Variance of a Process
5. Controlling Simultaneously the Mean and the Variance
6. Errors in the Variables
7. Statistical Tables
8. References.

In comparing different control charts the ARLs (Average Run Lengths) of the process in control and of the process out of control are considered, an approach most frequently used in the literature, where regrettably nothing is said about the sampling intervals, i. e. the time periods between two sampling actions. Usually the sampling intervals are selected by means of heuristics. Here, I want to emphasize that there exists a simple economic model to determine the length of these sampling intervals (see v. Collani (1989)), a model, where only few informations about the process are needed. In my opinion such an approach should at least be mentioned in a book on control charts.

Besides this point I agree with the contents and especially with the presentation of the material in this book, which is didactically very well organized; many illustrative figures and examples are given. There are only few typographical errors and I did not find serious mistakes; corrigenda are already added to the book. All in all I would like to recommend this book to everybody who wants to have a basic introduction to statistical process control.

Reference:

v. Collani, E. (1989): *The Economic Design of Control Charts*, Teubner Verlag, Stuttgart.

B. F. Arnold, Hamburg