Record Nr. UNINA9910437869903321 Autore Santos-Fernandez Edgar Titolo Multivariate statistical quality control using R / / Edgar Santos-Fernandez New York, : Springer, 2012 Pubbl/distr/stampa **ISBN** 1-283-64035-X 1-4614-5453-0 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (133 p.) Collana SpringerBriefs in statistics, , 2191-544X Disciplina 658.5 658.5/62 658.562 Soggetti Quality control - Statistical methods Multivariate analysis R (Computer program language) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto An introduction to R -- Basic Statistical and SQC Procedures --Multivariate Control Charts -- Multivariate Process Capability --Multivariate tools of support for MSQC -- Appendix -- Index --Problem -- Solutions. Sommario/riassunto The intensive use of automatic data acquisition system and the use of cloud computing for process monitoring have led to an increased occurrence of industrial processes that utilize statistical process control and capability analysis. These analyses are performed almost exclusively with multivariate methodologies. The aim of this Brief is to present the most important MSQC techniques developed in R language. The book is divided into two parts. The first part contains the basic R elements, an introduction to statistical procedures, and the main

aspects related to Statistical Quality Control (SQC). The second part covers the construction of multivariate control charts, the calculation of

Multivariate Capability Indices. .