1. Record Nr. UNINA9910254092803321

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Titolo	Statistical Methods for Quality Assurance : Basics, Measurement, Control, Capability, and Improvement / / by Stephen B. Vardeman, J. Marcus Jobe
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2016
ISBN	0-387-79106-X
Edizione	[2nd ed. 2016.]
Descrizione fisica	1 online resource (XIV, 437 p. 104 illus., 99 illus. in color.)
Collana	Springer Texts in Statistics, , 1431-875X
Disciplina	658.562
Soggetti	Statistics Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Statistics and Measurement -- Process Monitoring -- Process Characterization and Capability Analysis -- Experiment Design and Analysis for Process Improvement Part 1: Basics -- Experiment Design and Analysis for Process Improvement Part 2: Advanced Topics -- A Tables.
Sommario/riassunto	This undergraduate statistical quality assurance textbook clearly shows with real projects, cases and data sets how statistical quality control tools are used in practice. Among the topics covered is a practical evaluation of measurement effectiveness for both continuous and discrete data. Gauge Reproducibility and Repeatability methodology (including confidence intervals for Repeatability, Reproducibility and the Gauge Capability Ratio) is thoroughly developed. Process capability indices and corresponding confidence intervals are also explained. In addition to process monitoring techniques, experimental design and analysis for process improvement are carefully presented. Factorial and Fractional Factorial arrangements of treatments and Response Surface methods are covered. Integrated throughout the book are rich sets of examples and problems that help readers gain a better understanding of where and how to apply statistical quality control tools. These large and realistic problem sets in combination with the streamlined approach of the text and extensive supporting material facilitate reader

understanding. Second Edition Improvements Extensive coverage of measurement quality evaluation (in addition to ANOVA Gauge R&R methodologies) New end-of-section exercises and revised-end-of-chapter exercises Two full sets of slides, one with audio to assist student preparation outside-of-class and another appropriate for professors' lectures Substantial supporting material Supporting Material Seven R programs that support variables and attributes control chart construction and analyses, Gauge R&R methods, analyses of Fractional Factorial studies, Propagation of Error analyses and Response Surface analyses Documentation for the R programs Excel data files associated with the end-of-chapter problem sets, most from real engineering settings.