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    | Descrizione fisica | 1 online resource (619 p.) |
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    | Nota di contenuto | Modern Experimental Design; Contents; Preface; 1 Introduction; 1.1 Experiments All Around Us; 1.2 Objectives for Experimental Designs; 1.3 Planned Experimentation versus Use of Observational Data; 1.4 Basic Design Concepts; 1.4.1 Randomization; 1.4.2 Replication versus Repeated Measurements; 1.4.3 Example; 1.4.4 Size of an Effect That Can be Detected; 1.5 Terminology; 1.6 Steps for the Design of Experiments; 1.6.1 Recognition and Statement of the Problem; 1.6.2 Selection of Factors and Levels; 1.6.2.1 Choice of Factors; 1.6.2.2 Choice of Levels
1.7 Processes Should Ideally be in a State of Statistical Control1.8 Types of Experimental Designs; 1.9 Analysis of Means; 1.10 Missing Data; 1.11 Experimental Designs and Six Sigma; 1.12 Quasi-Experimental Design; 1.13 Summary; References; Exercises; 2 Completely Randomized Design; 2.1 Completely Randomized Design; 2.1.1 Model; 2.1.2 Example: One Factor, Two Levels; 2.1.2.1 Assumptions; 2.1.3 Examples: One Factor, More Than Two Levels; 2.1.3.1 Multiple Comparisons; 2.1.3.2 Unbalanced and Missing Data; 2.1.3.3 Computations; 2.1.4 Example Showing the Effect of Unequal Variances |

| Sommario/riassunto | A complete and well-balanced introduction to modern experimental design Using current research and discussion of the topic along with clear applications, Modern Experimental Design highlights the guiding role of statistical principles in experimental design construction. This text can serve as both an applied introduction as well as a concise review of the essential types of experimental designs and their applications. Topical coverage includes designs containing one or multiple factors, designs with at least one blocking factor, split-unit designs and their variations as |