1. Record Nr. UNINA9910497090603321

Autore	Chugo Daisuke
Titolo	Robotics for Sustainable Future : Clawar 2021
Pubbl/distr/stampa	Cham : , : Springer International Publishing AG, , 2021 ©2022
ISBN	3-030-86294-1
Descrizione fisica	1 online resource (508 pages)
Collana	Lecture Notes in Networks and Systems Ser. ; ; v.324
Altri autori (Persone)	TokhiMohammad Osman SilvaManuel F NakamuraTaro GoherKhaled
Soggetti	Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910830940603321

Autore	Kang Chang W (Chang Wok), <1957->
Titolo	Basic statistical tools for improving quality [[electronic resource] /] / Chang W. Kang, Paul H. Kvam
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, 2011
ISBN	1-283-59282-7 9786613905277 1-118-49175-0 1-118-49149-1 1-118-49151-3
Descrizione fisica	1 online resource (264 p.)
Classificazione	TEC032000
Altri autori (Persone)	KvamPaul H. <1962->
Disciplina	658.562 658.562015195
Soggetti	Process control - Statistical methods Quality control - Statistical methods Acceptance sampling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 212-213) and index.
Nota di contenuto	Basic Statistical Tools for Improving Quality; CONTENTS; Preface; 1 The Importance of Quality Improvement; 1.1 Introduction; 1.2 What Is Statistical Process Control?; 1.3 The Birth of Quality Control; 1.4 What Is a Process?; 1.5 Examples of Processes from Daily Life; 1.6 Implementing the Tools and Techniques; 1.7 Continuous Process Improvement; 1.8 The Goal of Statistical Process Control; 1.9 The Eight Dimensions of Quality for Manufacturing & Service; 1.10 The Cost of (Poor) Quality; 1.11 What Did We Learn?; 1.12 Test Your Knowledge; 2 Graphical Display of Data; 2.1 Introduction to eZ SPC 2.2 Qualitative and Quantitative Data2.3 Bar Chart; 2.4 Pie Chart; 2.5 Pareto Chart; 2.6 Radar Chart; 2.7 Histogram; 2.8 Box Plot; 2.9 Scatter Plot; 2.10 Cause and Effect Diagram; 2.11 What Did We Learn?; 2.12 Test Your Knowledge; Exercises; 3 Summarizing Data; 3.1 Central Tendency; 3.2 Variability; 3.3 Statistical Distributions; 3.4 Distributions in eZ SPC; 3.5 What Did We Learn?; 3.6 Test Your Knowledge; Exercises; 4 Analyzing Data; 4.1 Confidence Intervals; 4.2 Test of Hypothesis; 4.3

The p-value; 4.4 Probability Plots; 4.5 What Did We Learn?; 4.6 Test Your Knowledge; Exercises
5 Shewhart Control Charts5.1 The Concept of a Control Chart; 5.2 Managing the Process with Control Charts; 5.3 Variable Control Charts; 5.4 Attribute Control Charts; 5.5 Deciding Which Chart to Use; 5.6 What Did We Learn?; 5.7 Test Your Knowledge; Exercises; 6 Advanced Control Charts; 6.1 CUSUM Control Chart; 6.2 EWMA Control Chart; 6.3 CV Control Chart; 6.4 Nonparametric Control Charts; 6.5 Process Capability; 6.6 Gage R & R; 6.7 What Did We Learn?; 6.8 Test Your Knowledge; Exercises; 7 Process Improvement; 7.1 Correlation Analysis; 7.2 Regression Analysis; 7.3 Experimental Design
7.4 Overview of Experimental Design7.5 Principles of Experimentation; 7.6 One-Way Analysis of Variance; 7.7 Two Way Analysis of Variance; 7.8 Two-level Factorial Design Analysis; 7.9 What Did We Learn?; 7.10 Test Your Knowledge; Exercises; 8 End Material; 8.1 Final Exam; 8.2 Final Exam Solutions; 8.3 Test Your Knowledge: Answers; References; Glossary; Subject Index

Sommario/riassunto

"This book is an introductory book on improving the quality of a process or a system, primarily through the technique of statistical process control (SPC). There are numerous technical manuals available for SPC, but this book differs in two ways: (1) the basic tools of SPC are introduced in a no-nonsense, simple, non-math manner, and (2) the methods can be learned and practiced in an uncomplicated fashion using free software (eZ SPC 2.0), which is available to all readers online as a downloadable product. The book explains QC7 Tools, control charts, and statistical analysis including basic design of experiments. Theoretical explanations of the analytical methods are avoided; instead, results are interpreted through the use of the software"--