Quality Engineering: Off-Line Methods and Applications

Chao-Ton Su
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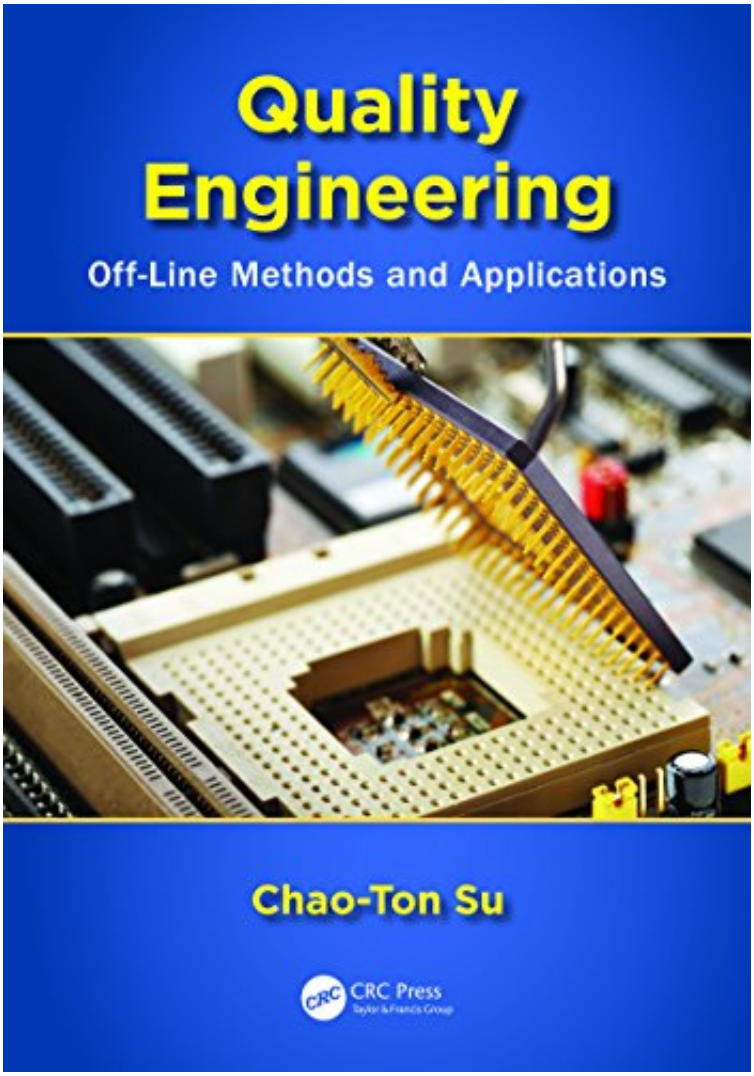

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Chao-Ton Su : Quality Engineering: Off-Line Methods and Applications before purchasing it in order to gage whether or not it would be worth my time, and all praised Quality Engineering: Off-Line Methods and Applications:

As quality becomes an increasingly essential factor for achieving business success, building quality improvement into all stagesmdash;product planning, product design, and process designmdash;instead of just manufacturing has also become essential. Quality Engineering: Off-Line Methods and Applications explores how to use quality engineering methods and other modern techniques to ensure design optimization at every stage. The book takes a broad approach, focusing on the userrsquo;s perspective and building a well-structured framework for the study and implementation of

quality engineering.Starting with the basics, this book presents an overall picture of quality engineering. The author delineates quality engineering methods such as DOE, Taguchi, and RSM as well as computational intelligence approaches. He discusses how to use a general computational intelligence approach to improve product quality and process performance. He also provides extensive examples and case studies, numerous exercises, and a glossary of basic terms.By adopting quality engineering, the defect rate during manufacturing shows noticeable improvement, the production cost is significantly lower, and the quality and reliability of products can be enhanced. Taking an integrated approach that makes the methods of upstream quality improvement accessible, without extensive mathematical treatments, this book is both a practical reference and an excellent textbook.

"This book provides a high quality reference for all engineers who wish to apply experimental design to actual product and process designs. It is well-organized and provides numerous practical examples and case studies that help the reader understand factorial experimental techniques, Taguchi Methods and other modern techniques more easily."?Gregory H. Watson, Past-President of ASQ and Past-Chairman of IAQ Chairman, Business Excellence Solutions, Ltd."During my thirty years in the semiconductor industry I have witnessed quality engineering methods become widely applied to shorten RD cycle time, optimize product/process parameters, and save cost. This book provides the complete structure of quality engineering with plenty of practical cases. It will help readers to learn these methods quickly and contribute to business success."?Long-Chin Tu, Vice President, Taiwan Semiconductor Manufacturing Company"Quality engineering methods are commonly used in industry to upgrade the quality level. This book is well written and is of great interest both to students and professionals wishing to develop or expand their knowledge of quality engineering. It contains clear presentation and practical implementation that are often missing from other texts."?Fugee Tsung, Hong Kong University of Science and Technology"Unimicron has learned how to use quality engineering approaches (both the DOE and Taguchi methods) that can reduce variation and enhance a productrsquo;s quality. This book aims to demonstrate the power of these approaches, and shows how these methods can be implemented in either a manufacturing or nonmanufacturing organization. The payback in customer satisfaction and growth will be dramatic when these approaches are carefully conducted."?Tzyy-Jang Tseng, Chairman, Unimicron Technology Corporation"Professor Su has extensive experience contending with problems regarding quality in the manufacturing and service industries and has made eminent contributions to the field of quality engineering. I believe that he is one of the best-qualified persons to author a book on quality engineering."?Noriaki Kano, Tokyo University of ScienceAbout the AuthorChao-Ton Su is a chair professor with the Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan.