

***Six Sigma Quality: Concepts & Cases - Volume I  
Lean and Statistical Tools in Six Sigma DMAIC Process with  
MINITAB® Applications***

Written by:

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*This book has been tested in Six Sigma training courses, undergraduate and graduate courses in Quality Management, Quality Engineering, MBA and Executive MBA courses. The content of the training courses are consistent with ASQ (American Society for Quality) and other agencies and universities offering Six Sigma education, training, and certification in the U.S.*

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**Brief Content of Volume I**

***Six Sigma Quality: Concepts and Cases - Volume I  
Lean and Statistical Tools in Six Sigma DMAIC Process with MINITAB®  
Applications***

The book contains:

- The fundamentals of Six Sigma, Lean Six Sigma, Design for Six Sigma (DFSS)
- Learning MINITAB statistical software
- Visual Representation of Data: Charts and Graphs for Six Sigma
- Data Analysis Concepts
- Quality Tools for Six Sigma
- Process Capability Analysis for Sigma
- Measurement System Analysis: Gage Repeatability & Reproducibility (Gage R & R)
- Exercises/projects/cases

**Additional Supplements**

- Power-point slides for each chapter
- Solutions and computer instructions for cases and problems

## *Lean Six Sigma: Training/Certification Books and Resources*

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Volume I of this book contains approximately 600 pages and focuses on the **DEFINE** and **MEASURE** phases of Six Sigma. The book contains numerous examples, cases, and hands-on exercises using the MINITAB statistical software that allows one to master the Six Sigma concepts. The text provides step-wise computer instructions to learn and apply Lean Six Sigma tools in real world. In addition, the tools used in Lean Sigma are discussed with examples.

The volume I of the Six Sigma book is divided into the following chapters:

### Chapter 1

Introduction to Six Sigma, Lean Sigma, and Design for Six Sigma

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### Chapter 2

Introduction to MINITAB Statistical Software: Getting Started with MINITAB

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### Chapter 3

Visual Representation of Data: Charts and Graphs for Six Sigma

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### Chapter 4

Using Statistics to Summarize Data Sets: Concepts & Computer Analysis

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### Chapter 5

Quality Tools for Six Sigma

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### Chapter 6

Process Capability Analysis for Six Sigma

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### Chapter 7

Measurement System Analysis: Gage Repeatability & Reproducibility  
(Gage R&R) Study

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