

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

Written by:

Prof. Amar Sahay, Ph.D.

B.S. Production Engineering (India)
M.S. Industrial Engineering (USA)
Ph.D. Mechanical Engineering (USA)
(Ph.D. emphasis in Manufacturing Systems, CAD/CAM and Quality Engineering)
Senior Members of Institute of Industrial Engineers, USA; Society of Manufacturing Engineering (USA), American Society for Quality (ASQ, USA)
Member of NAFSA (Association of International Educators, USA)
Member of AEA (American Education Evaluation Association)
Professor of Operations and Supply Chain, over 17 years of teaching, training, research and consulting experience
Author of 4 books in Six Sigma; more than 35 articles/research papers in national and international journals and conference proceedings

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.

Brief Content of Volume I

*Six Sigma Qualities: 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

Lean Six Sigma: Training/Certification Books and Resources

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

Volume I of this book contains approximately 560 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 the Six Sigma tools in real world. In addition, the tools used in Lean Sigma are discussed with examples.