Preface ix
Acknowledgments xiii
Editors xv
Contributors xvii

Chapter 1 Asset Management Excellence .................................................. 1
   Don Barry

SECTION I  Maintenance Management Fundamentals

Chapter 2 Asset Classes and the World of Life-Cycle Asset Management .... 11
   Joel McGlynn and Frank "Chip" Knowlton

Chapter 3 A Framework for Asset Management .................................. 23
   Thomas Port, Joseph Ashun, and Thomas J. Callaghan

Chapter 4 Measurement in Maintenance Management .......................... 49
   Edited by Don Barry
   Original by J. Stevens

Chapter 5 Information Management and Related Technology ............... 89
   Don Barry, Brian Helstrom, and Joe Potter
   Original by B. Stevens

Chapter 6 Materials Management Optimization ................................ 133
   Don Barry and Eric Olson
   Original by Monique Petit

SECTION II  Managing Equipment Reliability

Chapter 7 Assessing and Managing Risk ........................................ 161
   Siegfried F. Sanders
   Original by J. Kaderavek and G. Walker
Chapter 8  Reliability by Design: Reliability-Centered Maintenance .......... 189
  Don Barry
  Original by James Picknell

Chapter 9  Reliability by Operator: Total Productive Maintenance .......... 217
  Doug Stretton and Patrice Catoir

SECTION III  Optimizing Maintenance Decisions

Chapter 10  Reliability Management and Maintenance Optimization: Basic
  Statistics and Economics ................................................... 231
  Andrew K. S. Jardine
  Original by Murray Wiseman

Chapter 11  Maintenance Optimization Models .................................... 251
  Andrew K. S. Jardine

Chapter 12  Optimizing Maintenance and Replacement Decisions .......... 259
  Andrew K. S. Jardine

Chapter 13  A Maintenance Assessment Case Study .......................... 301
  Don Barry

SECTION IV  Achieving Maintenance Excellence

Chapter 14  Real Estate, Facilities, and Construction .......................... 317
  Andrew Carey and Joe Potter

Chapter 15  Information Technology Service Management Life Cycle .......... 351
  Brian Helstrom and Ron Green

Chapter 16  Information Technology Asset Management ..................... 363
  Ron Green and Brian Helstrom

Chapter 17  Achieving Asset Management Excellence ........................ 379
  Don Barry
  Original by John D. Campbell
Contents

Chapter 18  The Future of Asset Management Solutions: Consolidation, Capability, Convergence......................................................... 391

Joel McGlynn and Don Fenhagen

Appendix A: References, Facts, Figures, and Formulas................................. 401

Appendix B: RFID Updates............................................................................. 447

Jordan Olivero, Taylor Teal, and Casey Hidaka

Appendix C: PAS 55—An Emerging Standard for Asset Management in the Industry ................................................................. 455

Don Barry and Jeffrey Kurkowski

Index............................................................................................................. 467