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Nota di contenuto	Intro -- DETERMINING AND ASSESSING PROCESS CAPABILITY FOR ENGINEERS AND MANUFACTURING -- DETERMINING AND ASSESSING PROCESS CAPABILITY FOR ENGINEERS AND MANUFACTURING -- CONTENTS -- Chapter 1 INTRODUCTION -- HISTORICAL OVERVIEW -- ASSESSING PROCESS CAPABILITY -- REFERENCES AND ADDITIONAL READING -- Chapter 2 CONDUCTING A CAPABILITY STUDY -- ESTABLISHING CAPABILITY GOALS -- FREE OF VARIATION DUE TO ASSIGNABLE CAUSE -- SAMPLING CONSIDERATIONS -- USING CONTROL CHART DATA -- WHEN CONTROL CHART DATA ARE NOT USED -- LONG AND SHORT RUN CAPABILITY STUDIES -- Chapter 3 MEASURING PROCESS CAPABILITY -- FIRST GENERATION MEASURES AND THEIR ESTIMATORS -- THE PROCESS CAPABILITY INDEX, Cp -- Example -- THE CAPABILITY INDICES - Cpl, Cpu, Cpk AND Cpm -- ASYMMETRIC SPECIFICATION LIMITS -- THE CAPABILITY INDICES - Cpl*, Cpu*, Cpk*, Cpm* AND Cpmk -- CONSOLIDATING THE CAPABILITY INDICES, Cpw -- INTERPRETING PROCESS CAPABILITY MEASURES -- Example -- ALTERNATIVE MEASURE OF PROCESS CAPABILITY INDEX -- Example -- REFERENCES AND ADDITIONAL READINGS -- Chapter 4 ANALYZING PROCESS CAPABILITY STUDIES -- THE OC CURVE APPROACH FOR ANALYZING pC^* -- THE OC CURVE APPROACH FOR ANALYZING pkC^* -- THE OC CURVE APPROACH TO ANALYZING pmC^* -- Example -- A BAYESIAN APPROACH FOR ANALYZING Cp, Cpm, Cpk

AND Cpmk -- Example -- MORE BAYESIAN INTERVALS -- Example -- THE BAYESIAN VERSUS OC CURVE APPROACH -- OTHER APPROACHES FOR ANALYZING pC^* -- ANALYZING pgC^* -- ANALYZING pwC^* -- UNILATERAL AND NON-SYMMETRIC SPECIFICATION LIMITS -- AN OC CURVE APPROACH FOR ANALYZING pmC -- BAYESIAN APPROACH FOR Cpm^* AND $Cpmk$ -- HISTOGRAMS AND CONTROL CHARTS -- NORMAL PROBABILITY PAPER AND PROCESS CAPABILITY PAPER -- A BRIEF OVERVIEW OF PROBABILITY PLOTS -- Example -- PROCESS CAPABILITY PAPER USING MATHEMATICA -- PROCESS CAPABILITY PAPER ENHANCEMENTS.

ADDITIONAL VIEWS IN SUPPORT OF PROCESS CAPABILITY PAPER -- PROCESS CAPABILITY CHART -- Example -- REFERENCES AND ADDITIONAL READINGS -- Chapter 5 EFFECTS OF NON-NORMALITY -- EFFECTS OF NON-NORMALITY ON pm -- GENERAL EFFECTS OF NON-NORMALITY -- Example -- REFERENCES AND ADDITIONAL READINGS -- Chapter 6 MULTIVARIATE MEASURES OF PROCESS CAPABILITY -- MULTIVARIATE SPECIFICATION LIMITS -- MULTIVARIATE PROCESS CAPABILITY -- A MULTIVARIATE PROCESS CAPABILITY MEASURE -- Example -- COMMENTS -- Example -- REFERENCES AND ADDITIONAL READING -- Chapter 7 ASSESSING CAPABILITY IN THE PRESENCE OF SYSTEMATIC ASSIGNABLE CAUSE -- Example -- DETERMINING PROCESS CAPABILITY WITHIN A LIFECYCLE -- Example -- MANAGING THE PROCESS USING CAPABILITY MEASURES -- Example -- REFERENCES AND ADDITIONAL READING -- Chapter 8 ESTABLISHING, MEASURING, ASSESSING & IMPROVING PROCESS CAPABILITY -- PROCESS BACKGROUND -- CAPABILITY ASSESSMENT -- TURNING THE RESULTS INTO DESIGN SPECIFICATIONS -- MONITORING THE PROCESS -- IMPROVING THE PROCESS -- REFERENCES AND ADDITIONAL READING -- Chapter 9 CAPABILITY ASSESSMENT FOR SHORT RUN/LOW VOLUME PROCESSES -- ASSESSING, ESTIMATING AND TRACKING PROCESS CAPABILITY -- MULTIVARIATE EXTENSION -- REFERENCES AND ADDITIONAL READING -- REFERENCES -- INDEX.

Sommario/riassunto

This work illustrates the use of the most common process capability indices. The hope is that it will foster the safe use and development of PCIs among practitioners and researchers.
