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4.4.5 NPP of Factor Effects 4.4.6 NPP of Residuals; 4.4.7 Response Surface Plots and Regression Models; 4.5 Model Building for Predicting Response Function; 4.6 Confidence Interval for the Mean Response; 4.7 Statistical, Technical and Sociological Dimensions of DOE; 4.7.1 Statistical Dimension of DOE; 4.7.2 Technical Dimension of DOE; 4.7.3 Sociological and Managerial Dimensions of DOE; Exercises; References;
5 Screening Designs; 5.1 Introduction; 5.2 Geometric and Non-geometric P-B Designs; Exercises; References; 6 Full Factorial Designs;
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6.2 Example of a 22 Full Factorial Design 6.2.1 Objective 1: Determination of Main/Interaction Effects That Influence Mean Plating Thickness; 6.2.2 Objective 2: Determination of Main/Interaction Effects That Influence Variability in Plating Thickness; 6.2.3 Objective 4: How to Achieve a Target Plating Thickness of 120 Units?; 6.3 Example of a 23 Full Factorial Design; 6.3.1 Objective 1: To Identify the Significant Main/Interaction Effects That Affect the Process Yield; 6.3.2 Objective 2: To Identify the Significant Main/Interaction Effects That Affect the Variability in Process Yield
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Sommario/riassunto

The tools and techniques used in Design of Experiments (DoE) have been proven successful in meeting the challenge of continuous improvement in many manufacturing organisations over the last two decades. However research has shown that application of this powerful technique in many companies is limited due to a lack of statistical knowledge required for its effective implementation. Although many books have been written on this subject, they are mainly by statisticians, for statisticians and not appropriate for engineers. Design of Experiments for Engineers and Scientists
