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3.3 Closing Remarks; 4 Expert Judgement-Based Parameter Estimation Method for Machine Tool Reliability Analysis; 4.1 Expert Judgement as an Alternative Source of Data in Reliability Studies; 4.2 Expert Judgement-Based Parameter Estimation Methods; 4.2.1 Non-Repairable Component; 4.2.2 Repairable Assembly; 4.3 Some Desirable Properties of a "Good" Estimator; 4.4 Closing Remarks; 5 Machine Tool Maintenance Scenarios, Models and Optimization; 5.1 Overview of Maintenance; 5.1.1 Maintenance Models; 5.1.2 Maintenance Optimization Techniques; 5.2 Machine Tool Maintenance 5.3 Machine Tool Maintenance Scenarios; 5.4 Preventive Maintenance Optimization Models for Different Maintenance Scenarios; 5.4.1 Preventive Maintenance Optimization in Maintenance Scenario 1 (MSc 1) (Replacement Model); 5.4.2 Preventive Maintenance Optimization in Maintenance Scenario 2 (MSc 2) (Repair-Replacement Model); 5.4.3 Preventive Maintenance Optimization in Maintenance Scenario 3 (MSc 3) (Overhauling Model); 5.5 Closing Remarks; 6 Reliability and Maintenance Based Design of Machine Tools; 6.1 Optimal Reliability Design; 6.2 Optimal Reliability Design of Machine Tools 6.2.1 Machine Tool Functional Design Scenarios; 6.2.1.1 Special Purpose Machine Tool Design; 6.2.1.2 General Purpose Machine Tool Design; 6.2.1.3 Customized Machine Tool Design; 6.2.2 Simultaneous Optimization of Reliability and Maintenance under Three Functional Design Scenarios; 6.2.2.1 Simultaneous Optimization for Special Purpose Machine Tool; 6.2.2.2 Simultaneous Optimization for General Purpose Machine Tool Design Scenario; 6.2.2.3 Simultaneous Optimization for Customized Machine Tool Design; 6.3 Failure Mode and Effects Analysis; 6.3.1 Cost-Based FMEA Approach; 6.4 Closing Remarks
7 Machine Tool Maintenance and Process Quality Control
