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1.7.3. Uncertainty range, coverage factor k and range of relative uncertainty1.8. Approaches for determining type A and B uncertainties according to the GUM; 1.8.1. Introduction; 1.8.2. Properties; 1.8.3. Brief description of type-A uncertainty evaluation method; 1.8.4. Type-B uncertainty methods; 1.9. Principle of uncertainty calculation: types A and B; 1.9.1. Error on the repeated measure: calculation of compound standard uncertainty; 1.9.2. Applications on the laboratory calculations of uncertainties; 1.9.3. Simplified models for the calculations of measurement uncertainties
1.9.4. Laboratory model of dimensional metrology1.9.5. Measurement uncertainty evaluation discussion; 1.9.6. Contribution of the GUM in dimensional metrology; 1.10. Summary; 1.11. Bibliography; Chapter 2. Fundamentals of Dimensional and Geometrical Tolerances According to ISO, CSA (Canada), and ANSI (USA; 2.1. Introduction to geometrical products specification; 2.2. Dimensional tolerances and adjustments; 2.2.1. Adjustments with clearance: Ø80 H8/f7; 2.2.2. Adjustments with uncertain clearance: Ø80 H7/k6; 2.2.3. Adjustments with clamping or interference
2.2.4. Approach for the calculation of an adjustment with clearance

Sommario/riassunto

Applied Metrology for Manufacturing Engineering, stands out from traditional works due to its educational aspect. Illustrated by tutorials and laboratory models, it is accessible to users of non-specialists in the fields of design and manufacturing. Chapters can be viewed independently of each other. This book focuses on technical geometric and dimensional tolerances as well as mechanical testing and quality control. It also provides references and solved examples to help professionals and teachers to adapt their models to specific cases. It reflects recent developments in ISO and GPS standard