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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 10610-2009

**Geometrical product specifications (GPS) -- Surface texture:
Profile method -- Rules and procedures for the assessment of
surface texture**

产品几何技术规范（GPS）表面结构

(English Translation)

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Table of Contents

Foreword	3
1 Scope	4
2 Normative References	4
3 Terms and Definitions	5
4 Parameter Estimation	5
5 Rules for Comparison of the Measured values with the Tolerance Limits	6
6 Parameter Evaluation	8
7 Rules and Procedures for Inspection Using Stylus Instruments	9
Appendix A (Informative) Simplified Procedure for Roughness Inspection	13
Appendix B (Informative) Position in the GPS Matrix Model	15

1 Scope

This Standard specifies the rules for comparison of the measured values with the tolerance limits for surface texture parameters defined in GB/T 3505-2009, GB/T

18618, GB/T 18778.2-2003, GB/T 18778.3-2006.

This Standard also specifies the default rules for selection of cut-off wavelength, λ_{c} , for measuring roughness profile parameters according to GB/T 3505-2009 by using stylus instruments according to GB/T 6062.

2 Normative References

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 131-2006 Geometrical Product Specifications (GPS) - Indication of Surface

Texture in Technical Product Documentation (ISO 1302:2002, IDT)

GB/T 1031-2009 Geometrical Product Specifications (GPS) - Surface Texture:

Profile Method - Surface Roughness Parameters and Their Value

GB/T 3505-2009 Geometrical Product Specifications (GPS) - Surface Texture:

Profile Method - Terms Definitions and Surface Texture Parameters (ISO 4287:1997, IDT)

GB/T 6062-2009 Geometrical Product Specifications (GPS) - Surface Texture: Profile Method - Nominal Characteristic of Contact (Stylus) Instruments (ISO 3274:1996, IDT)

GB/T 18618-2002 Geometrical Product Specifications (GPS) - Surface Texture - Profile Method - Motif Parameters (eqv ISO 12085:1996)

GB/T 18778.1-2002 Geometrical Product Specifications (GPS) - Surface Texture: Profile Method - Surfaces Having Stratified Functional Properties - Part 1: Filtering and General Measurement Conditions (eqv ISO 13565-1:1996)

GB/T 18778.2-2003 Geometrical Product Specifications (GPS) - Surface Texture: Profile Method Surface Having Stratified Functional Properties - Part 2: Height Characterization Using the Linear Material Ratio Curve (ISO 13565-2:1996, IDT)

GB/T 18778.3-2006 Geometrical Product Specifications (GPS) - Surface Texture: Profile Method - Surface Having Stratified Functional Properties - Part 3: Height Characterization Using the Material Probability Curve (ISO 13565-3:1998, IDT)

GB/T 18779.1-2002 Geometrical Product Specifications (GPS) - Inspection by Measurement of Workpieces and Measuring Equipment - Part 1: Decision Rules for Proving Conformance or Non-Conformance with Specifications (eqv ISO 14253-1:1998)

GB/Z 20308-2006 Geometrical Product Specifications (GPS) - Masterplan (ISO/TR 14638:1995, MOD)

3 Terms and Definitions

For the purpose of this Standard, the terms and definitions given in GB/T 6062-2009, GB/T 3505-2009, GB/T 18618-2002, GB/T 18778.2-2003, GB/T 18778.3-2006 apply.

4.1.1 Parameter estimate

An estimate of the parameter's value is calculated using the measured data from only one sampling length.

4.1.2 Average parameter estimate

An average parameter estimate is calculated by taking the arithmetic mean of the parameter estimates from all the individual sampling lengths.

When the standard number of five sampling lengths is used for roughness profile parameters, no suffix needs to be added to the symbol.

For a parameter evaluated over a number of sampling lengths other than five, that number shall be added as a suffix to the parameter symbol (e.g. Rz1, Rz3).

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