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

GB/T 33523.6-2017

**Geometrical product specifications (GPS) -- Surface texture:
Areal -- Part 6: Classification of methods for measuring surface
texture**

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Foreword

GB/T 33523 "Geometrical Product Specifications (GPS) surface structure area method" is divided into the following parts.

- Part 2. terms, definitions and surface structure parameters;
- Part 3. Standardized operational set;
- Part 6. Classification of surface structure measurement methods;
- Part 7. Software measurement standards;
- Part 601. Nominal characteristics of contact (stylus) instruments;
- Part 602. Nominal characteristics of non - contact (confocal color difference probe) instruments;
- Part 603. Nominal characteristics of non - contact (phase - shift interference microscopy) instruments;
- Part 604. Nominal characteristics of non - contact (coherent scanning interference) instruments;
- Part 605. Nominal characteristics of non - contact (point auto - focus) instruments;
- Part 701. Calibration and measurement of contact (stylus) instruments.

This part is part 6 of GB/T 33523.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part is equivalent to ISO 25178-6..2010 "Geometrical Product Specifications (GPS) Surface Area Method Part 6. Table

Classification of surface structure measurement methods ".

1 Scope

This part of GB/T 33523 specifies a classification system that is primarily used for surface structure measurement methods and defines three types of methods,

Class methods, and a brief description of the specific methods.

This part is suitable for the classification of surface structure measurement methods.

2 normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article

Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 3505-2009 Geometrical product specifications (GPS) - Surface texture - Terminology - Terms, definitions and surface structure parameters

(ISO 4287..1997, IDT)

ISO 25178-2 Geometrical product specifications (GPS) - Surface area method - Part 2. Terminology, definitions and surface structure

Parameters [Geometrical products specifications (GPS) - Surface texture. Areal-Part 2. Terms, definitions

and surface texture parameters]

ISO /IEC Guide 99..2007 International Metrology Vocabulary Basic and General Concepts and Terminology [International vocabulary of

metrology-Basic and general concepts and associated terms (VIM)]

3.1 General terms

GB/T 3505, ISO /IEC Guide 99 and ISO 25178-2 and the following terms and definitions apply to this document.

3.1.1

Measure the coordinate system measurement coordinate system

Coordinate system for surface structure parameter measurement.

Note 1. If the nominal surface is a plane (or part of a plane), the right-handed Cartesian Cartesian coordinate system, the X-axis, the Y-axis

In the plane where the nominal surface is located, and the X-axis is pointing in the direction

of the scanning line, the Z-axis is pointing outward (from the material part to the surrounding

quality). In conjunction with Note 3 and 3.3.3 of 3.2.1, the Cartesian coordinate system is used in this section.

Note 2. The canonical coordinate system in ISO 25178-2 is also visible.

3.1.2

Surface profile

A contour that specifies the intersection of the plane and the actual surface.

Note. In practice, a plane is usually chosen to be parallel to the actual surface and in a suitable direction to select a plane.

[GB/T 3505-2009, Definitions 3.1.4]