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

GB/T 45683-2025

**Geometrical product specifications (GPS) - Geometrical
tolerancing - General geometrical specifications and general
size specifications**

产品几何技术规范（GPS） 几何公差 一般几何规范和一般尺寸规范

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is equivalent to ISO 22081:2021 "Geometrical Product Specifications (GPS) - General geometrical specifications and general dimensions for geometrical tolerances".
Inch Specifications.

1 Scope

This document defines the terms and definitions for general geometrical specifications and general dimensional specifications in accordance with 5.12 of ISO 8015:2011 and The basic principles and rules for general geometric specifications and general dimensional specifications are established.

This document does not include general specifications defined by other standards and documents associated with these standards.

The general geometrical specifications and general dimensional (linear or angular) specifications defined in this document apply only to component elements (including dimensional elements).

This document does not apply to line features within derived features or component features (for the definition of component and derived features, see ISO 17450-1).

The general dimensional specifications in this document do not cover dimensions other than linear and angular dimensions (see ISO 14405-2).

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.
(GPS)-Fundamentals-Concepts,principlesandrules]

Note: GB/T 4249-2018 Product Geometry Technical Specification (GPS) Basic concepts, principles and rules (ISO 8015:2011, MOD)

ISO 17450-1 Geometrical product specifications (GPS) General concepts Part 1: Models for geometrical specifications and verification [Geomet-verification]

Note: GB/T 24637.1-2020 Product Geometric Specification (GPS) General Concepts Part 1: Model for Geometric Specification and Verification (ISO 17450-1:2011,MOD)

ISO 17450-2 Geometrical product specifications (GPS) General concepts Part 2: Basic principles, specifications, operational sets and uncertainties

Note: GB/T 24637.2-2020 Product geometry specification (GPS) General concepts Part 2: Basic principles, specifications, operation sets and uncertainties (ISO 17450-2:2012,MOD)

Note: GB/T 38760-2020 Geometrical Specification for Products (GPS) Elements used in specification and inspection (ISO 22432:2011, MOD)

Note: GB/T 38761-2020 Product Geometry Specification (GPS) Characteristics and Condition Definitions (ISO 25378:2011, MOD)

3 Terms and definitions

The terms and definitions defined in ISO 8015, ISO 17450-1, ISO 17450-2, ISO 22432 and ISO 25378 and the following apply