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

GB/T 24630.2-2024

**Geometrical product specifications (GPS) - Flatness - Part 2:
Specification operators**

产品几何技术规范（GPS）平面度 第2部分：规范操作集

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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 is required. This document is Part 2 of GB/T 24630 "Geometrical Technical Specification for Products (GPS) Flatness". GB/T 24630 has been published The following sections. Part

1 Scope

GB/T 24630.2-2024 gives the specification operators for flatness in the Chinese GPS system. Where Part 1 defines the vocabulary and the parameters, this part defines the complete chain of operations that a flatness specification implies and that a measurement must reproduce: the partition of the feature, the extraction of points and the sampling strategy that governs how many and where, the filtration that separates form from waviness and roughness, the association of the reference plane and the evaluation of the parameter, together with the default operator that applies when the drawing says nothing and the modifiers by which each step can be specified explicitly. Its practical value is that it removes the ambiguity in which most flatness disputes live, since two laboratories measuring the same surface with different sampling and filtering will legitimately report different values unless the operator is stated. It took effect on 29 September 2024.

This document specifies a complete set of standard operations for the flatness of a single component. This document applies only to the complete flatness profile of a single component.

2 Normative references

The contents of the following documents constitute the 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. in this document. ISO 12781

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in ISO 127811 and ISO 174502 apply.

4 Complete set of standard operations

4.1 Overview A complete set of specification operations (see ISO 174502) is an ordered set of operations consisting of well-defined, complete specification operations. The complete set of specification operations for flatness defines the bandwidth of the flatness surface, given a suitable stylus tip geometry.

Note. In practice, it is unrealistic to achieve complete coverage of the planarity elements given by the theoretical minimum point density within an acceptable time frame using existing technology. Therefore, a more restrictive extraction scheme is adopted, giving specific information related to planar shape deviations rather than general information.