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

GB/T 38762.2-2020

**Geometrical product specifications (GPS) - Dimensional
tolerancing - Part 2: Dimensions other than linear or angular
sizes**

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Foreword

GB/T 38762 "Geometric Technical Specifications (GPS) Dimensional Tolerance" is divided into 3 parts.

- Part 1. Linear dimensions;
- Part 2. Dimensions other than linear and angular dimensions;
- Part 3. Angle dimensions.

This part is Part 2 of GB/T 38762.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the redrafting method to modify and adopt ISO 14405-2..2018

Part 2. Dimensions other than linear and angular dimensions.

The technical differences between this part and ISO 14405-2..2018 and the reasons are as follows.

--- With regard to normative quotation documents, this part has been adjusted with technical differences to adapt to China's technical conditions and adjustments

The situation is reflected in Chapter 2 "Regulatory Reference Documents", with specific adjustments as follows.

- * Replaced ISO 1101 with GB/T 1182 modified to adopt international standards;
- * Replaced ISO 8015 with GB/T 4249 modified to adopt international standards;
- * Replace ISO 13715 with GB/T 19096 equivalent to international standards;
- * Replaced ISO 17450-1 with GB/T 24637.1 modified to adopt international standards;
- * Replaced ISO 17450-2 with GB/T 24637.2 modified to adopt international standards;
- * Replaced ISO 17450-3 with GB/T 24637.3 modified to adopt international standards;
- * Replaced ISO 14405-1 with GB/T 38762.1 modified to adopt international standards;

* Replaced ISO 14405-3 with GB/T 38762.3 modified to adopt international standards.

This part is proposed and managed by the National Product Geometry Technical Standardization Technical Committee (SAC/TC240).

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1 Scope

This part of GB/T 38762 describes the uncertainty caused by the application of dimensional specifications to control dimensions other than linear and angular dimensions,

And the benefits of using geometric specifications to control the above dimensions.

Dimensional tolerances can be marked with +/- tolerances or geometric specifications.

Dimensions other than linear dimensions use uncertainty due to +/- tolerance (e.g., the uniqueness mentioned in GB/T 1804 and GB/T 6414

Vertical tolerance and general tolerance), an explanation is given in Appendix A.

Note 1. The legend in this section is simplified, only to explain the content of the text, does not reflect the actual use. Therefore, the legend is only a simplified

? Callouts.

Note 2. For the labeling of dimensional tolerances, see the following.

--- GB/T 38762.1 linear size;

--- GB/T 38762.3 angle size;

--- ISO 2538-1 and ISO 2538-2 wedge;

--- GB/T 15754 cone.

Note 3. The rules of geometric specifications are given in GB/T 1182.

2 Normative references

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

Pieces. For the cited documents without date, the latest version (including all amendments) applies to this document.

GB/T 1182 Product Geometric Technical Specification (GPS) Geometric Tolerance Shape,

Orientation, Position and Runout Tolerance Marking (GB/T 1182-2018, ISO 1101:2017, MOD)

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

GB/T 19096 Technical drawing pattern drawing method does not define the terms and annotations of shape edges (GB/T 19096-2003, (ISO 13715:2000, IDT)

GB/T 24637.1 Geometrical Product Specification (GPS) General Concept Part 1. Geometric Specification and Inspection Model (GB/T 24637.1-2020, ISO 17450-1:2011, MOD)

GB/T 24637.2 Product Geometric Technical Specifications (GPS) General Concept Part 2. Basic Principles, Specifications, Operation Sets and Inaccuracies Rating (GB/T 24637.2-2020, ISO 17450-2:2012, MOD)

GB/T 24637.3 Product Geometric Technical Specifications (GPS) General Concept Part 3. Tested Elements (GB/T 24637.3-2020, ISO 17450-3:2016, MOD)

GB/T 38762.1 Product Geometric Technical Specifications (GPS) Dimensional Tolerance Part 1. Linear Dimensions (GB/T 38762.1-2020, (ISO 14405-1:2016, MOD)

GB/T 38762.3 Geometrical Product Specifications (GPS) Dimensional Tolerance Part 3. Angle Dimensions (GB/T 38762.3-2020, ISO 14405-3:2016, MOD)

ISO 129-1 Technical drawing representation of dimensions and tolerances Part 1. General guidelines [Technical product documentation (TPD) - Presentation of dimensions and tolerances - Part 1. General principles]