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

GB/T 38762.3-2020

**Geometrical product specifications (GPS) - Dimensional
tolerancing - Part 3: 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 3 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 the use of ISO 14405-3:2016 "Geometric Technical Specifications of Products (GPS) Dimensional Tolerance Section 3

Part. Angle Dimensions".

The technical differences between this part and ISO 14405-3:2016 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 8015 with GB/T 4249 modified to adopt 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 14405-1:2016 with GB/T 38762.1-2020, which adopts international standards modified;
- * Replaced ISO 14405-2 with GB/T 38762.2 modified to adopt international standards.

The following editorial changes have been made in this section.

--- Take the content of the second paragraph of Chapter 3 as a note;

--- Informative Appendix D adds D.4 related standards.

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

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Product Geometric Technical Specification (GPS) Dimensional Tolerance

Part 3. Angle dimensions

1 Scope

This part of GB/T 38762 establishes the default specification set of angular dimensions, and defines a series of angular dimension elements

Specific specification operation set. cone (truncated such as truncated or untruncated), wedge (truncated or untruncated), two relatively straight lines (from perpendicular to the wedge/truncated)

The plane where the straight line of the broken wedge intersects the wedge/truncated wedge is obtained by the plane containing the axis of the cone/conical table and the phase of the cone/conical table

Obtained), see Figure 1 and Figure 2.

This section also specifies the specification modifiers and drawing annotations of the above angular dimensions.

This section contains the following angular dimensions.

--- Local angle size.

a) Angle dimension between two lines;

b) Partial angular dimensions.

--- Global angle size.

a) Direct global angle dimension;

1) Least square angle dimension;

2) Minimum area angle size.

b) Statistical angular size/indirect global angular size.

1) Maximum angle size;

2) Minimum angle size;

3) Average angle size;

4) Angle size range;

5) Extreme average angle size;

6) Median angle dimension;

7) Standard deviation of angular dimensions.

This section defines the meaning of the following angular dimension tolerance labels.

--- and/or-limit deviation, such as $0^\circ/-0.5^\circ$;

--- Mark the upper limit size (ULS) and/or lower limit size (LLS), such as 35° max. Or 15° min., $34^\circ/36^\circ$;

--- With or without modifiers.

This section gives a series of tools to express the characteristics of different types of angular dimensions, but does not provide any special features about functions/applications and angular dimensions.

Information about the relationship between the levy.

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

2011, MOD)

GB/T 24637.1 Geometrical Product Specification (GPS) General Concept Part 1.

Geometric Specification and Inspection Model

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