

ICS 17.040.30

CCS J 04



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

GB/T 38761-2020

**Geometrical product specifications (GPS) - Characteristics and
conditions - Definitions**

Issued on: April 28, 2020

Implemented on: November 1, 2020

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

Foreword

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

This standard uses the redrafting method to modify and adopt ISO 25378..2011 "Product Geometrical Technical Specifications (GPS) Features and Conditions Definition".

There are technical differences between this standard and ISO 25378..2011.The corresponding technical differences and their causes are as follows.

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

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

- * Replace ISO 3534-1..2006 with GB/T 3358.1 equivalent to international standards;
- * Replace ISO 3534-2 with GB/T 3358.2 equivalent to international standards;
- * Replace ISO 17450-1..2011 with GB/T 24637.1 modified to adopt international standards;
- * Replace ISO 17450-2 with GB/T 24637.2 modified to adopt international standards;
- * Replace ISO 22432 with GB/T 38760 modified to adopt international standards.

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

This standard was drafted by. China Machine Productivity Promotion Center, Beijing Times Zhifeng Technology Co., Ltd., Zhengzhou Enpute Technology Co., Ltd.

Division, Shandong Road is the first Intelligent Technology Co., Ltd., Guanzhi Automobile Co., Ltd., Xi'an Jiaotong University.

1 Scope

This standard defines general terms regarding geometric specifications, features and

conditions. These definitions are based on GB/T 24637.1 and

The concepts in GB/T 38760 and the mathematical description in Appendix B of GB/T 24637.1-2020.

This standard is not only applicable to industrial applications, but can also be used as a "road map" for understanding and planning geometric features, thus making

Industry and software manufacturers are unified in standardization.

This standard defines the basic types of geometric features and conditions, and these descriptions apply to the following situations.

--- a workpiece;

--- an assembly;

--- A batch of workpieces;

--- A batch of assembly parts.

These definitions are based on the concept and duality principle of the operation set in GB/T 24637.1 and GB/T 24637.2, and by

The description of the type of geometric features in GB/T 38760.

Conceptually, these canonical operations can be used as canonical operation sets or check operation sets (the principle of duality).

This standard is not intended to define GPS specifications, symbols or other types of expressions.

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 3358.1 Statistics vocabulary and symbols Part 1.General statistical terms and terms used in probability (GB/T 3358.1-

2009, ISO 3534-1..2006, IDT)

GB/T 3358.2 Statistics Vocabulary and Symbols Part 2.Application Statistics (GB/T 3358.2-2009, ISO 3534-2..2006,

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 Inaccuracy

Rating (GB/T 24637.2-2020, ISO 17450-2..2012, MOD)

GB/T 38760 Product Geometric Technical Specification (GPS) specifications and elements
used in inspection (GB/T 38760-2020,

ISO 22432..2011, MOD)

3 Terms and definitions

The terms and definitions defined in GB/T 3358.1, GB/T 3358.2 and GB/T 24637.1 and the following apply to this document.

3.1

Geometrical specification

A set of one or more conditions specified on one or more geometric features.