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

GB/T 42124.1-2022

**Geometrical product specifications (GPS) - Dimensional and
geometrical tolerances for moulded parts - Part 1: Vocabulary**

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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 part 1 of GB/T 42124.1 "Geometric Product Specification (GPS) Dimensions and Geometric Tolerances of Molded Parts".

GB/T 42124.1 has issued the following parts.

--- Part 1. Vocabulary.

This document is modified to adopt ISO 8062-1.2007 "Geometric Product Specifications (GPS) Dimensional and Geometric Tolerances of Molded Parts Part 1 Sub. Vocabulary".

Compared with ISO 8062-1.2007, this document has made the following structural adjustments.

--- Added the chapter "Normative References";

--- The content of "Scope" is adjusted to Chapter 1 (see Chapter 1).

The technical differences between this document and ISO 8062-1.2007 and their reasons are as follows.

--- Increased the scope of application of this document (see Chapter 1) to meet the requirements of my country's standardization document drafting rules.

The following editorial changes have been made to this document.

--- Since ISO 3134-4.1985 is abolished, the source of 3.2 is deleted;

--- Added Note 3 of 6.1;

--- Appendix A of ISO 8062-1.2007 has been rewritten.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

In order to better align the product geometric technical specification standards of molded parts dimensions and geometric tolerances in my country with the latest ISO GPS,

To make various industries and enterprises of my country's molded parts more competitive in the international market, SAC/TC240 plans to formulate GB/T 6414 "Product Geometry Technical Specification (GPS) Dimensional and Geometric Tolerances for Molded Parts".

GB/T 42124.1 is intended to be composed of 4 parts, each of which is interrelated and independent, which together constitute the size and geometry of molded parts.

The content of the tolerance.

--- Part 1.Vocabulary. It is intended to define the terms and conditions associated with describing features, shapes and tolerance types when tolerances are given definition.

--- Part 2.Rules. It aims to give the geometric tolerance marking rules of the final molded parts and molded parts after machining.

--- Part 3.General dimensional tolerances, geometric tolerances and machining allowances of castings. intended to specify the general

Dimensional and geometric tolerances, and machining allowance levels.

--- Part 4.General tolerances of castings marked with profile tolerances relative to the general datum system. designed to give relative to the final

The general datum system retained on the workpiece, the method of marking the general geometric tolerances of castings using profile tolerances. return

Designed to specify the machining allowances and drafts of castings formed by all casting metals and their alloys by various manufacturing processes

slope.

Product Geometry Specification (GPS)

Dimensional and geometric tolerances of molded parts

Part 1.Vocabulary

1 Scope

This document defines the dimensions and geometric tolerances used to describe elements, shapes, and

Glossary of terms and tolerance types and their definitions.

This document is applicable to product geometric specifications for molded parts.

2 Normative references

This document has no normative references.

3 Terms and definitions related to molded parts

3.1

molded parts moldedpart

any workpiece produced using a mold (4.2).

Note. The workpieces produced by using molds include but are not limited to the following types.

--- casting (3.2);

--- Die forgings (3.4);

--- Injection molded parts (3.3);

--- Powder metallurgy parts (3.5);

--- Glass moldings (3.6);

--- Rubber moldings (3.7).

3.1.1

Rough molded parts rawmouldedpart

Molded part without any subsequent processing after exiting the mold (4.2).

3.1.2

final molded part finalmouldedpart

(if required) molded parts after completion of the removal (8.1.1) operation.

3.1.3

Finalize all machined, ready-to-use moldings.

3.2

casting casting

A collective term for finished or near-finished workpieces formed by solidification of metals or alloys in molds (4.2).

3.3

Injection molded parts injectionmouldedpart

workpiece formed by heating or melting a thermoplastic material and pressing it into a reusable mold (4.3)