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

GB/T 47574.1-2026

**Centrifugally cast steel and alloy products - Part 1: General
testing and tolerances**

离心铸钢及合金铸件 第1部分：通用试验与公差
(English Translation)

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Table of Contents

- Foreword
- Introduction
- 1 Scope
- 2 Normative references

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 1 of GB/T 47574 "Centrifugal Cast Steel and Alloy Castings". GB/T 47574 has the following parts published.

---Part 1: General Tests and Tolerances;

---Part 2: Heat-resistant materials.

This document is equivalent to ISO 13583-1:2023 "Centrifugal castings of steel and alloy castings - Part 1: General tests and tolerances".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Technical Committee on Foundry Standardization (SAC/TC54).

Introduction

GB/T 47574 "Centrifugal Cast Steel and Alloy Castings" adopts the international standard ISO 13583 "Centrifugal Cast Steel and Alloy Castings" and is consistent with...

Maintaining consistency with international standards will guide my country's production of centrifugal cast steel and alloy castings to reach international technological levels, thereby ensuring product consistency.

The quality and stability of castings will enhance the recognition of Chinese casting products in the international market.

GB/T 47574 aims to establish test methods, tolerances, and general requirements for heat-resistant material grades applicable to centrifugally cast steel and alloy castings.

It consists of two parts.

---Part 1: General Tests and Tolerances. The aim is to provide general testing and tolerances applicable to centrifugal cast steel and alloy castings produced in both horizontal and vertical environments.

General test methods and tolerance requirements.

---Part 2: Heat-resistant materials. The purpose is to specify the requirements for cast steel and nickel-based alloys used in high-temperature service products manufactured using centrifugal casting processes.

Grade, alloy composition and mechanical property requirements.

Centrifugal castings and alloy castings Part 1: General Tests and Tolerances

1 Scope

This document specifies the horizontal and vertical production methods for centrifugal cast steel and alloy castings suitable for the following applications.

- a) Heat resistant;
- b) Corrosion resistant;
- c) For general engineering use.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

ISO 3651-1 Determination of resistance to intergranular corrosion of stainless steel - Part 1: Austenitic and ferritic - Austenitic (duplex) stainless steel Note. GB/T 4334-2020 Corrosion of metals and alloys-Test methods for intergranular corrosion of austenitic and ferritic-austenitic (duplex) stainless steels (ISO 3651-1:1998 and ISO 3651-2:1998, MOD)
ISO 3651-2 Determination of resistance to intergranular corrosion of stainless steel - Part 2: Ferritic, austenitic and ferritic-austenitic (duplex) stainless steel Note. GB/T 4334-2020 Corrosion of metals and alloys-Test methods for intergranular corrosion of austenitic and ferritic-austenitic (duplex) stainless steels (ISO 3651-1:1998 and ISO 3651-2:1998, MOD)
Note. GB/T 9444-2019 Magnetic particle testing of cast steel and cast iron parts (ISO 4986:2010, MOD) Note. GB/T 9443-2019 Penetrant testing of cast steel and cast iron parts (ISO 4987:2010, MOD) ments) Note. GB/T 40805-2021 General technical conditions for

delivery and acceptance of cast steel parts (ISO 4990:2015, MOD) ISO 4992-1 Ultrasonic testing of steel castings - Part 1: General purpose steel castings Note. GB/T 7233.1-2023 Ultrasonic testing of cast steel parts - Part 1: General purpose cast steel parts (ISO 4992-1:2020, MOD) ISO 4992-2 Ultrasonic testing of steel castings - Part 2: High-pressure steel castings Note. GB/T 7233.2-2023 Ultrasonic testing of cast steel parts - Part 2: High pressure cast steel parts (ISO 4992-2:2020, MOD)