



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

GB/T 40805-2021

Steel castings. General technical delivery requirements

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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 of Standardization Documents"

Drafting.

This document uses the redrafting method to modify and adopt ISO 4990.2015 "General Technical Conditions for Delivery and Acceptance of Steel Castings".

Compared with ISO 4990.2015, this document has many structural adjustments. Appendix A lists the differences between this document and ISO 4990.2015.

A list of chapter number comparisons.

Compared with ISO 4990.2015, this document has technical differences.

The set vertical single line (I) is marked, and a list of the corresponding technical differences and their reasons is given in Appendix B.

This document was proposed and managed by the National Foundry Standardization Technical Committee (SAC/TC54).

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1 Scope

This document specifies the ordering requirements, technical requirements, inspection and test methods, inspection rules, markings, quality certificates, packaging and transportation.

This document is applicable to the procurement and delivery acceptance of steel castings produced by various processes.

2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 222 The allowable deviation of the chemical composition of the finished steel

GB/T 228.1 Tensile test of metallic materials Part 1. Room temperature test method (GB/T 228.1-2010, ISO 6892-1.

2009, MOD)

GB/T 228.2 Tensile test of metallic materials Part 2. High temperature test method (GB/T 228.2-2015, ISO 6892-2.

2011, MOD)

GB/T 229 Charpy pendulum impact test method for metallic materials (GB/T 229-2020, ISO 148-1.2016, MOD)

GB/T 231.1 Brinell hardness test of metallic materials Part 1. Test method (GB/T 231.1-2018, ISO 6506-1.

2014, MOD)

GB/T 232 Bend test method for metallic materials (GB/T 232-2010, ISO 7438.2005, MOD)

GB/T 2039 Uniaxial Tensile Creep Test Method for Metallic Materials (GB/T 2039-2012, ISO 204.2009, MOD)

GB/T 4334 Corrosion of metals and alloys, austenite and ferrite-austenite (duplex) stainless steel intergranular corrosion test method

(GB/T 4334-2020, ISO 3651-1.1998; ISO 3651-2.1998, MOD)

GB/T 4336 Carbon steel and low- and medium-alloy steel determination of multi-element content spark discharge atomic emission spectrometry (conventional method)

GB/T 5677 Casting Radiographic Inspection (GB/T 5677-2018, ISO 4993.2015, MOD)

GB/T 6414 Casting dimensional tolerance, geometric tolerance and machining allowance (GB/T 6414-2017, ISO 8062-3.2007, MOD)

GB/T 7233.1 Ultrasonic testing of steel castings Part 1.General purpose steel castings (GB/T 7233.1-2009, ISO 4992-1.2006, MOD)

GB/T 7233.2 Ultrasonic testing of steel castings Part 2.High pressure steel castings (GB/T 7233.2-2010, ISO 4992-2.2006, MOD)

GB/T 9239.1 Mechanical vibration constant (rigid) rotor balance quality requirements Part 1.Specification and balance tolerance inspection (GB/T 9239.1-2006, ISO 1940-1.2003, IDT)

GB/T 9443 Penetration testing of cast steel and iron castings (GB/T 9443-2019, ISO 4987.2010, MOD)

GB/T 9444 Cast steel and iron castings magnetic particle inspection (GB/T 9444-2019, ISO 4986.2010, MOD)

GB/T 11170 Determination of multi-element content of stainless steel by spark discharge atomic emission spectrometry (conventional method)

GB/T 13298 Metal Microstructure Inspection Method

GB/T 20066 Sampling and sample preparation methods for the determination of the chemical composition of steel and iron (GB/T 20066-2006, ISO 14284.