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**REPUBLIC OF CHINA**

**中华人民共和国国家标准**

GB/T 11352-2009

Replace GB/T 11352-1989

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**Carbon Steel Castings for General Engineering Purpose**

**一般工程用铸造碳钢件**

(ISO 3755 : 1991, Cast carbon steels for general engineering purpose, ISO 4990 : 2003, Steel castings - General technical delivery requirements, MOD)

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## Foreword

This standard was formulated on the basis of revision of international standards ISO 3755:1991 "Cast Carbon Steels for General Engineering Purposes" and ISO 4900:2003 "Steel Castings -- General Technical Delivery Requirements".

This standard was formulated by integrating and revising standards ISO 3755: 1991 and ISO 4900 : 2003 and changed in major technical contents as showed below:

——Great revision has been made in the structure such as: Chapter 7 of ISO 3755: 1991 has been revised; table 1 permissible variation in chemical composition and table 2 alternate material list in ISO 4900: 2003 has been deleted.

——Specification, sampling location and dimension of mechanical property test blocks in annex B of ISO 4900 : 2003 has been revised.

Comparison table for this standard clauses and international standard clauses are given in annex C so as to compare conveniently.

This standard will replace GB/T 11352 - 1989 "Carbon Steel Castings for General Engineering Purpose". Compared to GB/T 11352—1989, the following major technical contents are revised in this standard:

——Add the spectral analysis method for chemical composition analysis;

——S and P controlling quantities of each grade are reduced;

——Test blocks for mechanical property of attached castings and single-cast test block are parallel for adoption.

Annex A, B and C in this standard are informative.

This standard was proposed by China Machinery Industry Federation.

This standard is under jurisdiction of the National Technical Committee of Standardization for Foundry

Drafting organizations: Shaoguan Foundry and Forging Group

Participating organizations: Shanghai Zhongxing Jiqi Chang Co., Ltd. and Shenyang Research Institute of Foundry

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Versions issued in history to be substituted by this Standard include:

——GB/T 11352—1989.

# Carbon Steel Castings for General Engineering Purpose

## 1 Scope

This standard specifies the grade, technical requirement, test methods, test rules, marking, packaging, storage and transport of carbon steel castings for general engineering purpose.

This standard is applicable to carbon steel castings for general engineering purpose.

## 2 Normative references

The following normative documents contain provision which, through reference in this text, constitute provisions of this standard. For dated reference, the subsequent amendments to (excluding the correction contents) or revisions of any of these publications do not apply to this standard. However, parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. For undated references, the latest edition of the normative document referred to applies.

GB/T 222 Permissible Tolerances for Chemical Composition of Steel Products

GB/T 223.3 Methods for Chemical Analysis of Iron, Steel and Alloy – The Diantipyrylmethane Phosphomolybdate Gravimetric Method for the Determination of Phosphorus Content

GB/T 223.4 Alloyed steel - Determination of Manganese Content - Potentiometric or Visual Titration Method

GB/T 223.60 Methods for Chemical Analysis of Iron, Steel and Alloy – The Perchloric Acid Dehydration Gravimetric Method for the Determination of Silicon Content

GB/T 228 Metallic materials - Tensile Testing at Ambient Temperature (GB/T 228—2002, eqv ISO 6892:1998)

GB/T 229 Metallic materials - Charpy Pendulum Impact Test Method (GB/T 229—2007, ISO 148-1 : 2006, MOD)

GB/T 231.1 Metallic Brinell Hardness Test - Part 1: Test Methods (GB/T 231.1—2002, eqv ISO 6506-1: 1999)

GB/T 231.2 Metallic Brinell Hardness Test - Part 2: Verification and Calibration of Hardness Testers (GB/T 231.2—2002, ISO 6506-2:1999, MOD)

GB/T 231.3 Metallic Brinell Hardness Test - Part 3: Calibration of Hardness Reference Blocks (GB/T 231.3—2002, ISO 6506-3:1999, MOD)

GB/T 4336 Standard Test Method for Spark Discharge Atomic Emission Spectrometric Analysis of Carbon and Low-alloy Steel (Routine Method)

GB/T 5613 Code for Representing Cast Steels

GB/T 5677 Radiographic Testing for Steel Castings radiogram (GB/T 5677—2007, ISO 4993: 1987, IDT)

GB/T 6414 Castings - System of Dimensional Tolerances and Machining Allowances (GB/T 6414—1999, eqv ISO 8062:1994)

GB/T 7233 Methods for Ultrasonic Testing and for Specifying Quality Levels of Steel Castings

GB/T 8170 Rules of Rounding Off for Numerical Values & Expression and Judgement of limiting values

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