

ICS 77.120.30

CCS J31



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

GB/T 13819-2013

Replacing GB/T 13819-1992

Copper and copper alloy castings

铜及铜合金铸件

Issued on: September 18, 2013

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Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 13819-1992 "copper alloy castings." This standard compared with GB/T 13819-1992, the main technical content Changes are as follows:

- Standard name was changed to "copper and copper alloy castings";
- Remove the casting classification, labeling method modifies the pattern;
- Remove the casting surface grading, modify the surface quality of the casting;
- Increasing the sealing surface of the casting, threaded parts and to withstand high temperatures, high corrosion, pressure and other parts, provisions are generally not allowed welding repair Change the provisions related to the repair of casting defects;
- Add additional requirements, such as analysis of impurity elements and the like;
- Increasing the chemical composition of the alloy spectroscopy and spectroscopic sampling methods;
- Increased casting geometry, size and weight tolerances of the test method;
- Increasing the evaluation method of casting surface roughness;
- Increased copper and copper alloy conductivity detection performance;
- Modify the division of the batch. This standard by the National Standardization Technical Committee Cast (SAC/TC54) and focal points. This standard is drafted by: Qingdao Chia Tai Co., Ltd. Casting. Participated in the drafting of this standard. Shenyang Foundry Research Institute, Wuchang Shipbuilding Heavy Industry Co., Ltd. The main drafters of this standard. Songjing Qing, Dong Feng, YANG Qin, Song Kun Peng, Qi Xiaobing. This standard replaces the standards previously issued as follows:
- GB/T 13819-1992. Copper and copper alloy castings

1 Scope

GB/T 13819-2013 is the Chinese national standard on copper and copper alloy castings, in

the field of metallurgy. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 18 September 2013 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 June 2014. Classification: ICS 77.120.30, CCS J31. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the copper and copper alloy castings (hereinafter referred to as cast) grades and marks, technical requirements, test methods, inspection rules, and Signs, packaging, transport and storage. This standard applies to copper and copper alloy sand casting, metal casting, continuous casting, centrifugal casting, investment casting castings. Other methods Production of castings can be implemented by reference.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. RT Test Method. Test Part 1

GB/T 228.1 metallic materials tensile

GB/T 231.1 metallic materials Brinell hardness test - Part 1. Test methods

GB/T 351 metal material resistivity measurement method

GB/T 1176-2013 Copper and copper alloy casting

GB/T 5121 (all parts) of copper and copper alloys -

GB/T 5678 sampling cast alloys spectroscopy method

GB/T 6414 casting dimensional tolerances and machining allowances

GB/T 11351 casting weight tolerance

GB/T 15056 Evaluation Method of casting surface roughness

GB/T 15749 Determination of quantitative metallography

JB/T 5108 metallurgical casting brass YS/T 478 copper and copper alloy conductivity eddy current testing method YS/T 482 copper and copper alloy analysis photoemission spectroscopy

3 Grades and marks

3.1 Alloy Alloy shall comply with GB/T 1176's.

3.2 mark pattern Casting pattern marked as follows: xxxxx - Alloy xx - Casting method code (S, J, La, Li, R) GB/T 13819 Standard Number NOTE. S

--- sand casting;

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