

ICS 77.140.80

CCS J31



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

GB/T 11351-2017

Replacing GB/T 11351-1989

Mass tolerances of casting

铸件重量公差

Issued on: November 1, 2017

Implemented on: May 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Terms and definitions
- 3 Basic principles
 - 3.2 Determination of the nominal mass of casting
 - 3.3 Selection of mass tolerance
- 4 Indication method
- 5 Inspection methods
- Appendix A

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 11351-1989 "Mass tolerance of casting". Compared with GB/T 11351-1989, the main technical contents of this standard are as follows: - MODIFY the terms and definitions; - MODIFY the method of determining the nominal mass of castings; - MODIFY the selection rules of mass tolerance of casting; - MODIFY the value of mass tolerance of casting; - ADD Appendix A and Appendix B. This standard was proposed by and shall be under the jurisdiction of the National Foundry Standardization Technical Committee (SAC/TC 54). Responsible drafting organizations of this standard. Shenyang Foundry Research Institute, Anhui Mechanical Science Research Institute. Participated drafting organizations of this standard. Anhui Excalibur Technology Co., Ltd., Anhui Hualing Western Kitchen Equipment Co., Ltd., Anhui Yingliu Group Huoshan Casting Co., Ltd., CITIC Dicastal Co., Ltd., Tianrun Crankshaft Co., Ltd., Zhejiang Terry Heavy Machinery Co., Ltd., Cixi Huili Electromechanical Co., Ltd., Hebei Jianzhi Casting Group Co., Ltd., Maanshan Haitian Heavy Industry Technology Development Co., Ltd., Dongfeng Precision Casting Co., Ltd., Jiangxi Zhangshu Fuling Internal Combustion Engine Parts Co., Ltd., Taiyuan University of Technology. The main drafters of this standard. Zhang Yin, Ding Chuanhai, Pei Bing, Xu Zhenghua, Du Yingliu, Shu Xuecheng, Alateng, Wang Ji, Cong Jianchen, Shao Shibo, Zhou Hongwei, Luo Yu, Ren Jiuhong, Li Guolin, Sun Aimin, Ma Bo, Chen Tao, Wang Rongfeng. This standard replaces the standard previously issued as follows: - GB/T 11351-1989. Mass tolerances of casting

1 Scope

GB/T 11351-2017 is the Chinese national standard on mass tolerances of casting, 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 1 November 2017 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 May 2018. Classification: ICS 77.140.80, 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 terms and definitions, basic principles, marking methods, inspection methods of mass tolerances of castings (hereinafter referred to as mass tolerances). This standard applies to castings as produced by various casting methods.

2 Terms and definitions

The following terms and definitions apply to this document.

2.1 Nominal mass of casting The mass as calculated according to the casting chart or the mass of the casting that is qualified by both the supplier and the buyer or the reference mass of the casting to be determined according to a certain method, including the amount of variation in the casting mass as caused by such factors as casting's machining allowance and other process allowances.

2.2 Mass tolerance of casting The ratio of the difference between the actual mass of the casting and the nominal mass to the nominal mass of the casting (expressed as a percentage).

3 Basic principles

3.1 Grade and code of mass tolerance The code for the mass tolerance is indicated by the letters "MT" 1). The mass tolerance is divided into 16 levels, that is, MT1 to MT

16. The mass tolerance's levels are listed in Table 1.

3.3 Selection of mass tolerance

3.3.1 Corresponding to a certain mass tolerance level, the mass tolerance value shall be selected from Table 1 according to the range of the nominal mass.

1 The letter "MT" is an abbreviation for the English "Mass tolerance". The mass tolerance level corresponds to the dimensional tolerance level.

4 Indication method

4.1 When the mass tolerance of the casting is used as the basis for acceptance, it shall be

indicated in the drawings or technical documents.

4.2 When the mass tolerance is symmetrical tolerance, it is marked as. GB/T 11351 MT 10.

5 Inspection methods

5.1 The inspection method for the mass tolerance of castings adopts the weighing method.
The nominal mass of the casting and the mass of the casting

Appendix A

(Informative) Mass tolerance level of castings produced in small batch and single piece