

ICS 25.120.30

CCS J 46



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

GB/T 4678.20-2025

Die casting dies - Components - Part 20: Hoisting columns

压铸模 零件 第20部分：吊装柱

Issued on: May 30, 2025

Implemented on: December 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

3.1 Hoisting column

4 Type and size

4.1 Type A hanging column

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 for standardization documents" Drafting.

This document is part 20 of GB/T 4678 "Die casting parts". GB/T 4678 has been published as follows.

- Part 1: Template;
- Part 2: Circular inserts;
- Part 3: Rectangular inserts;
- Part 4: Square guide pillars;
- Part 5: Circular guide cylinders;
- Part 6: Guide bushing with head;
- Part 7: Straight guide bushings;
- Part 8: Push plate;
- Part 9: Push plate guide column;
- Part 10. Push plate guide sleeve;
- Part 11. Push rod;
- Part 12. Reset lever;
- Part 13. Push plate gasket;

- Part 14.Limiting nails;
- Part 15.Spacers;
- Part 16.Flat push rods;
- Part 17.Push pipe;
- Part 18.Support columns;
- Part 19.Positioning elements;
- Part 20.Lifting columns.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee for Mould Standardization (SAC/TC33).

This document was drafted by: Ningbo Daxie Development Zone Tianzheng Mould Co., Ltd., Guilin Electric Science Research Institute Co., Ltd., Ningbo Xunhui Electric Co., Ltd., Ningbo Haoli Metal Co., Ltd., Ningbo Yinrun Auto Parts Co., Ltd., Ningbo Boda Machinery Co., Ltd., Ningbo Vocational and Technical College of Technology, Chongqing Yujiang Xingao Mould Co., Ltd., Huashuo Technology (Ningbo Yinzhou) Co., Ltd., Ningbo Beilun Oufanst Precision Machinery Co., Ltd.

Company, Dongguan Xinhaoxin Precision Industry Co., Ltd., Tianjin Shiya Mould Co., Ltd., Kejia (Changxing) Mould Manufacturing Co., Ltd., Guangdong Qixin Precision Casting Co., Ltd., Dongguan Shenhua Plastic Hardware Co., Ltd., and Huzhou Anda Auto Parts Co., Ltd.

The main drafters of this document are: Hu Jun, Lu Ruhui, Wang Chong, Cao Lichan, Gu Yinhai, Li Guanghao, Xia Tian, Chen Jianwei, Deng Yangquan, Zhang Jianmeng, Lv Wei, Lin Shida, Su Jian, Chen Liangjin, Zeng Guanghua, Lu Wentao, Zhang Xiaoyan, Wang Xifu, Hu Ningang, Xu Weiping, Wang Xin, Li Chuquan, Fang Haocheng, Cui Jie.

Introduction

The series of standards for die casting mold parts are the basic technical documents for the design, manufacture, inspection and acceptance of die casting mold parts.

The purpose of the formulation of the "Parts" is to unify the basic structure and specifications of die-casting mold parts, standardize their technical requirements, and improve the product quality of domestic die-casting mold parts.

Increase the quantity and utilization rate of standard parts and reduce production costs.

In recent years, with the introduction of integrated die-casting product molding technology, die-casting molds have continued to develop towards large-scale, and mold hoisting has

become a mold manufacturing An important part of creation.

The document developed this time is GB/T 4678 Part 20, which complies with the compilation requirements of GB/T 1.1-2020.

The mold is stably and safely hoisted, so that it can timely and comprehensively reflect the latest mature technology content of the die-casting mold industry, and at the same time, it can be marked with other die-casting mold parts.

Quasi-phase coordination and matching are of great significance to promote the technological progress and upgrading of the die-casting mold industry and the extension of the industrial chain.

After adding Part 20, the number of GB/T 4678 die casting parts standards has increased to the following 20 parts.

- Part 1: Template;
- Part 2: Circular inserts;
- Part 3: Rectangular inserts;
- Part 4: Square guide pillars;
- Part 5: Circular guide cylinders;
- Part 6: Guide bushing with head;
- Part 7: Straight guide bushings;
- Part 8: Push plate;
- Part 9: Push plate guide column;
- Part 10. Push plate guide sleeve;
- Part 11. Push rod;
- Part 12. Reset lever;
- Part 13. Push plate gasket;
- Part 14. Limiting nails;
- Part 15. Spacers;
- Part 16. Flat push rods;
- Part 17. Push pipe;
- Part 18. Support columns;
- Part 19. Positioning elements;

- Part 20.Lifting columns.

Each part stipulates the structure, technical requirements, material requirements, marking, etc. of one of the parts.

According to the requirements, design and manufacture die-casting mold parts according to the corresponding parts.

Die casting parts Part 20.Lifting columns

1 Scope

This document specifies the types and dimensions, materials, technical requirements, inspection and marking of lifting columns for die casting moulds.

This document applies to the design and manufacture of lifting columns for die casting molds.

2 Normative references

GB/T 196-2003

GB/T 197-2018

GB/T 825

GB/T 4679

GB/T 15822

GB/T 27696

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Hoisting column

Parts used to install eyebolts and connect the mold body.

4.1 Type A hanging column

The type of A-type hanging column should be consistent with Figure 1, and the size should conform to the values given in Table 1.