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

GB/T 47255-2026

**Foundry machinery - Die casting machines and cells - Safety
technical specification**

铸造机械 压铸机和压铸单元 安全技术规范

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee on Standardization of Foundry Machinery (SAC/TC186). This document was drafted by: Shenzhen Lingwei Technology Co., Ltd., Suzhou Sanji Casting Equipment Co., Ltd., and Foshan Xiongxin Die Casting Co., Ltd. The company, Zhejiang Wanfeng Technology Development Co., Ltd., Yizumi Co., Ltd., Guangdong Hongtu Technology Co., Ltd., and Guangdong Minglida. Technology Co., Ltd., Zhuhai Runxingtai Electric Appliance Co., Ltd., Yixiang Intelligent Equipment (Shenzhen) Co., Ltd., Shanghai Yida Machinery Co., Ltd., Ning Polytech Technology Co., Ltd., Shenzhen Zhongyan Plastic Technology Co., Ltd., Foshan Wenjie Intelligent Machinery Co., Ltd., Shenzhen Shenshan Special Cooperation Co., Ltd. The following companies were involved. Lijing Technology

Co., Ltd., Suzhou Die Casting Technology Association, Wuxi Xinjiasheng Die Casting Machine Manufacturing Co., Ltd., and Dongfeng Motor Group Co., Ltd. Limited Company, Nantong Hongjin Metal Aluminum Industry Co., Ltd., Shenzhen Dingzhengxin Technology Co., Ltd., Jiarui Technology (Huizhou) Co., Ltd., Jinhua Bao Lin Technology Co., Ltd., Jinan Foundry & Forging Institute Inspection and Testing Technology Co., Ltd., China Automotive Engineering Co., Ltd., National Plastics Machinery Product Quality Supervision and Inspection Center, Huazhong University of Science and Technology, Anhui Anhuang Machinery Co., Ltd., Anhui Pengyan New Materials Co., Ltd., China Machinery Research Institute Standards and Technology Research Institute (Beijing) Co., Ltd. The main drafters of this document are. Liu Zhuoming, Pan Lingling, Cheng Wu, Xu Shanxin, Wan Shuiping, Wang Hongfei, Wu Jinhua, Zhang Xuxia, Gao Chao, and Liao Zhongjie. Tao Cheng, Wang Jicheng, Luo Zhaowen, Hu Zaoren, Zhang Jun, Cai Jiajun, Yang Jie, Wei Xinguang, Gao Qingjun, Wang Jun, Li Furu, Huang Hua, Feng Yongsheng, Guan Dingguo Zhang Shanggen, Li Antao, Wang Xicheng, Li Yong, Chang Yiqian, Cui Bo, Li Yuanfa, Chen Miaoyong, Li Chen, Liu Xiaolong, Guo Yiping, Wu Shusen, Zhang Chaoyong Huang Changwen, Fang Rui, Zhang Xiaofei.

According to the classification of GB/T 15706-2012, this document belongs to Class C standards. This document is particularly relevant to the following stakeholders related to the mechanical safety addressed in this document.

---Machine manufacturer;

---Health and Safety Agency. Other stakeholders affected by the level of mechanical safety include.

---Machine users;

---Machine owner;

---Service provider. All of the aforementioned stakeholders may participate in the drafting of this document. The scope of the machines covered in this document, as well as the hazards, hazardous conditions, and hazardous events covered, is given in the scope of this document. When the requirements in this document differ from those in Category A or Category B standards, for machines designed and manufactured in accordance with this document... For this instrument, the requirements in this document take precedence over the requirements in other standards. Foundry machinery, die casting machines, and die casting units Safety Technical Specifications

1 Scope

GB/T 47255-2026 is the Chinese national standard covering the die casting cell - a machine that closes with hundreds of tonnes and injects molten metal at high velocity, together with the robot, the trimming press and the die spray that surround it and that turn a machine into a cell nobody may walk into. It is one of seven foundry machinery safety

standards published together on 27 February 2026, which between them cover a whole foundry: melting, moulding and coremaking, pouring, shakeout, blasting, sand plant and die casting. First edition, in force since 1 September 2026. It was issued on 27 February 2026 and has been in force since 1 September 2026, as a first edition. The document is under the responsibility of the China Machinery Industry Federation. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the safety requirements and/or risk mitigation measures for die-casting machines and die-casting units, provides usage information, and describes the corresponding... Verification method. This document outlines the appropriate use of die-casting machines and die-casting units, both for their intended purpose and under conditions of misuse that the manufacturer could reasonably foresee. At the same time, the major hazards associated with such equipment, and examples of hazardous conditions or incidents (see Appendix A). This document applies to the design, manufacture, acceptance, and use of die-casting machines and die-casting units.

Note. Die casting machine and die casting unit include die casting machine, squeeze casting machine, and auxiliary equipment of die casting machine and squeeze casting machine (heat insulation and pouring device, mold temperature control). Equipment, parts handling and conveying equipment, spraying equipment, cooling equipment, and cleaning and repair equipment, etc.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 150.1 Pressure Vessels - Part

3 Stairs, steps and guardrails

GB/T 17888.4 Mechanical safety - Fixed access devices for machinery - Part

4 Fixed vertical ladders

GB/T 18153-2004 Safety data for determining the temperature limits of accessible hot surfaces in machinery.

GB/T 18209.1 Electrical safety indications, signs and operation of machinery - Part