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

GB/T 47237-2026

**Foundry machinery - Shakeout and decoring equipment -
Safety technical specification**

铸造机械 落砂除芯设备 安全技术规范

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Table of Contents

1	Scope
2	Normative references
3	Stairs, steps and guardrails
4	Fixed ladders
4.1	General Rules
4.2	General Requirements
4.3	Specialized Equipment Requirements
5	Verification of safety requirements and/or risk reduction measures
5.1	Verification Method
5.2	Verification Checklist
6	Usage Information
6.1	General Requirements
6.2	Signal and Warning Devices
6.3	Signs, Symbols (Pictographics) and Written Warnings
7	Technical Conditions for Industrial Robots
18	Table B.1 Verification of Safety Requirements and/or Risk Mitigation Measures

Foreword

This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting is scheduled. 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/TC 186). This document was drafted by: Qingdao Sanrui Machinery Manufacturing Co., Ltd., Nan'an Zhongji Standardization Research Institute Co., Ltd., and Jinmoushi (Xiamen). Management Consulting Co., Ltd., Zhejiang Wanfeng Technology Development Co., Ltd., Shandong Provincial Mechanical Design and Research Institute, China Automotive Engineering Co., Ltd. The company, Jinhua Baolin Technology Co., Ltd., Jinan Foundry & Forging Institute Inspection and Testing Technology Co., Ltd., and Fujian Minxuan Technology Co., Ltd. Company, Baoding Weier Foundry Machinery Co., Ltd., Jinan No.

2 Machine Tool Group Co., Ltd., Qingdao Antai Heavy Industry Machinery Co., Ltd., Qingdao Zhong Zhida Environmental Smelting Equipment Co., Ltd., Shandong Jiechuang Machinery Co., Ltd., Weihai Gongyou Foundry Machinery Co., Ltd., Jiangsu Dongfang Zhonglian Industrial Co., Ltd. Technology Co., Ltd., YTO (Luoyang) Casting & Forging Co., Ltd., Hefei Jianghuai Casting Co., Ltd., China National Heavy Duty Truck Group Jinan Power Co., Ltd. Company forming plant, Jinan Ruisheng Foundry Machinery Co., Ltd., Qingdao Qingli Environmental Protection Equipment Co., Ltd., Qingdao Kaijie Heavy Industry Machinery Co., Ltd. China Machinery Research Institute of Standards and Technology (Beijing) Co., Ltd. The main drafters of this document are. Tian Yongheng, Wu Guangxin, Zhu Bin, Lai Zhihuang, Wu Jun, Zhang Xuxia, Song Ying, Liu Xiaolong, Chen Miaoyong, and Li Chen. Nie Yuhan, Chen Huiling, Hou Ruoxian, Li Huadong, Ji Yan, Duan Jinting, Zhang Lei, Zhao Peng, Wang Ridong, Wang Jianping, Wang Yue, Bai Yang, Xiang Ziqiang Zhao Zhikun, Su Liguang, 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 who have a stake in the mechanical safety covered herein. --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 sand removal and core removal equipment Safety Technical Specifications

1 Scope

GB/T 47237-2026 is the Chinese national standard covering the shakeout - where hot castings and sand are separated by violent vibration, producing dust, noise and hot metal in one place, and where the guarding has to work with material constantly passing through it. 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 reduction measures for core removal equipment, as well as usage information, and describes the corresponding verification methods. This document outlines the procedures for using the core removal equipment for its intended purpose and for use under conditions of misuse that the manufacturer could reasonably foresee. Examples of major hazards, hazardous conditions, or hazardous events related to this type of equipment (see Appendix A). This document applies to the design, manufacture, and acceptance of core removal equipment.

Note. Sand removal and core removal equipment includes sand removal machines, sand removal drums, related sand removal equipment (vibrating conveyors, flat/scaled conveyors, foundry robots), core removal machines, and core removal... Core-related equipment (loading and unloading robots). This document does not apply to workpiece lifting and transfer equipment, or ventilation and dust removal equipment.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below. 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 2894 Safety Colors and Safety Signs

GB/T 3098.1-2010 Mechanical properties of fasteners - bolts, screws and studs

GB/T 3098.2-2025 Mechanical properties of fasteners - Part

3 Stairs, steps and guardrails

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

7 Technical Conditions for Industrial Robots

GB/T 7932 General rules and safety requirements for pneumatic systems and their components

GB/T 8196 General requirements for the design and manufacture of fixed and movable protective devices for mechanical safety.

GB/T 9969 General Rules for Instructions for Use of Industrial Products

GB 11291.1 Safety requirements for robots used in industrial environments - Part