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

GB 46037-2025

Replacing GB 13567-1998

Non-traditional machines - Safety technical requirements

特种加工机床 安全技术要求

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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 replaces GB 13567-1998 "Technical requirements for safety protection of EDM machines", GB.19998-2005 "Technical requirements for safety protection of EDM machines" GB 20775-2006 "Technical Requirements for Safety Protection of Machine Tools", GB 25493-2010 "Technical requirements for safety protection of rapid prototyping machine tools using laser as processing energy" and GB 26503-2011 "Technical requirements for safety protection of rapid prototyping machine tools using laser as processing energy" "Technical requirements for safety protection of forming machine tools", this document is in accordance with GB 13567-1998, GB.19998-2005, GB 20775-2006, Compared with GB 25493-2010 and GB 26503-2011, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

--- Added "General Safety Requirements", summarizing the technical content applicable to various types of special processing machine tools (see Chapter 4);

--- Changed the requirements for the use of flammable working fluids for EDM machines (see 5.3.1,

5.6.1 of GB 13567-1998);

--- Added "Safety and protection against hypoxia and asphyxiation" technical requirements for safety protection of additive manufacturing machine tools (see 7.5);

--- Added "Safety requirements for laser processing machine tools" (see Chapter 8);

--- Deleted "Information for use" and "Inspection of safety protection requirements" (see GB 13567-1998, GB.19998-2005, GB 20775-2006, GB 25493-2010, GB 26503-2011, Chapters 6 and 7). 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 Ministry of Industry and Information Technology of the People's Republic of China. The previous versions of this

document and the documents it replaces are as follows:

---GB 13567-1998;

---GB.19998-2005;

---GB 20775-2006;

---GB 25493-2010;

---GB 26503-2011;

---This is the first revision, integrating the above five standards. Safety technical requirements for special processing machine tools

1 Scope

GB 46037-2025 is the Chinese national standard on non-traditional machines - safety technical requirements, in the field of manufacturing engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 1 August 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 August 2026. Classification: ICS 25.080.99, CCS J59. 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 document specifies the general safety requirements for special processing machine tools, as well as EDM machine tools, ECM machine tools, and additive manufacturing machine tools. and safety requirements for laser processing machine tools. This document applies to the design, manufacture and use of various types of special processing machine tools.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 261 Determination of flash point - Pensky-Martin closed cup method

GB/T 5226.1 Electrical safety of machinery - Electrical equipment of machinery - Part

4 Laser Protection Screens

GB/T 14896.1 Terminology for special processing machine tools Part

7 Additive manufacturing machine tools

GB/T 14896.9 Terminology of special processing machine tools Part

9 Laser processing machine tools

GB 15577 Safety regulations for dust explosion prevention

GB/T 17626.2 Electromagnetic compatibility test and measurement technology
Electrostatic discharge immunity test

GB/T 17626.4 Electromagnetic compatibility test and measurement technology Electrical
fast transient burst immunity test

GB/T 17626.5 Electromagnetic compatibility test and measurement technology surge
(shock) immunity test

GB/T 17626.8 Electromagnetic compatibility test and measurement technology Power
frequency magnetic field immunity test

GB/T 17626.11 Electromagnetic compatibility test and measurement techniques Part

11. For devices with input current less than or equal to 16A per phase Voltage dips, short
interruptions and voltage variations immunity test for equipment

GB/T 18490.1 Mechanical safety Laser processing machines Part