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

GB/T 25431.2-2025

Replacing GB 25431.2-2010

**Extruders and extrusion lines of rubber and plastics - Part 2:
Safety requirements for die face pelletizers**

橡胶塑料挤出机和挤出生产线 第2部分：模面切粒机的安全要求

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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.

This document is Part 2 of GB/T 25431 "Rubber and Plastics Extruders and Extrusion Lines". GB/T 25431 has been published as follows. Part 2.

- Part 1: Safety Requirements for Extruders;
- Part 2: Safety Requirements for Die-face Pelletizers;

- Part 3: Safety requirements for traction devices.

This document replaces GB 25431.2-2010 "Rubber and Plastic Extruders and Extrusion Lines - Part 2: Safety Requirements for Die Cutting Machines".

Compared with GB 25431.2-2010, the main technical changes in the "Requirements" standard, apart from structural adjustments and editorial modifications, are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2010 edition);
- b) The definition of the term "die pelletizer" has been changed (see 3.1, 2010 edition of 3.1);
- c) The definitions of the terms "underwater pelletizer," "water ring pelletizer," "roller pelletizer," and "start valve" have been changed (see 3.1.1, 3.1.2, 3.1.5).
3.4 (3.2, 3.3, 3.6, and 3.9 of the 2010 edition);
- d) Chapter 4, Hazards and Hazardous Areas, has been removed from the 2010 edition. Major hazards are listed in tabular form in Appendix A (see 2010 edition). Chapter 4 of the edition);
- e) A "General Rule" has been added (see 4.1);
- f) The safety requirements for safety-related components of the control system have been changed, replacing "Category" with "Required Performance Level PLr" (see [link]).
4.6.1 (5.5.1 in the 2010 version);
- g) Detailed provisions have been added regarding safety requirements and protective measures for electrical hazards (see 4.4);
- h) Noise requirements have been changed (see 4.8, 5.7 in the 2010 version);
- i) The "Reference Standards" section has been removed (see Table 1, Chapter 6 of the 2010 edition);
- j) Added the necessary permanent markings to the machine (see 6.1);
- k) A noise testing procedure has been added (see Appendix B).

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 Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Rubber and Plastics Machinery (SAC/TC71).

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The release history of this document and the document it replaces is as follows.

- First published in 2010 as GB 25431.2-2010;
- This is the first revision.

Introduction

The safety standard system in the mechanical field consists of the following categories of standards.

- Class A standards (basic safety standards) provide basic concepts, design principles, and general characteristics applicable to all machinery.
- Class B standards (general safety standards) refer to a type of safety device that relates to a specific safety feature of machinery or has a wide range of applications.
- Category B1, safety characteristic standards (such as safety distance, surface temperature, noise);
- Class B2, safety device (such as two-hand operating device, interlocking device, pressure-sensitive device, protective device) standard.
- Class C standards (machinery product safety standards) are standards that specify detailed safety requirements for a particular machine or a group of machines.

According to the classification of GB/T 15706, this document belongs to Class C standards.

This document is particularly relevant to the following stakeholders related to machinery safety.

- Machine manufacturer;
- Health and Safety Agency.

Other stakeholders affected by the level of mechanical safety include.

- Machine users;

- Machine owner;
- Service provider;
- Consumer (when the machine is scheduled to be used by the consumer).

All of the aforementioned stakeholders may participate in the drafting of this document.

The scope of the machinery involved, as well as the hazards, hazardous conditions, and hazardous events covered, is given in the scope of this document.

When the requirements of 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 of this document take precedence over the requirements of other standards.

Rubber and plastic extruders and extrusion production lines Part 2: Safety Requirements for Die-face Pelletizers

1 Scope

This document specifies the following safety requirements for the design and manufacture of die-face pelletizers.

- Underwater pelletizer;
- Water ring pelletizer;
- Dry pelletizer;
- Centrifugal pelletizer;
- Roller pelletizer.

This document applies to the entire lifecycle of the die-cutting pelletizer (see section 5.4 of GB/T 15706-2012), during the intended usage process.

In addition, all significant hazards and dangers related to the die-cutting pelletizer that may arise from misuse that the manufacturer could reasonably foresee.

Hazardous conditions and dangerous events (see Appendix A).

This document does not apply to strip pelletizers.

This document does not include design requirements for exhaust ventilation systems.

2 Normative references

GB/T 3766-2015

GB/T 3767-2016