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

**GB/T 25936.1-2024**

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**Rubber and plastics size reduction machines - Part 1: Safety  
requirements for blade granulators**

橡胶塑料粉碎机械 第1部分：刀片式破碎机安全要求

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## Table of Contents

|                                                                                     |    |
|-------------------------------------------------------------------------------------|----|
| 1 Scope ...                                                                         | 1  |
| 2 Normative references ...                                                          | 1  |
| 3 Terms and Definitions ...                                                         | 2  |
| 4 Safety requirements and/or protection/risk reduction measures ...                 | 4  |
| 4.1 General requirements ...                                                        | 4  |
| 4.2 Mechanical hazards ...                                                          | 4  |
| 4.3 Noise Hazards ...                                                               | 6  |
| 4.4 Dangers caused by loss of stability of machinery ...                            | 6  |
| 4.5 Electrical Hazards ...                                                          | 6  |
| 4.6 Dangers of Ignoring Ergonomic Principles ...                                    | 7  |
| 5 Verification of safety requirements and/or protection/risk reduction measures ... | 7  |
| 6 Usage Information ...                                                             | 8  |
| 6.1 General requirements ...                                                        | 8  |
| 6.2 User Manual ...                                                                 | 8  |
| 6.3 Marking ...                                                                     | 9  |
| 13 References ...                                                                   | 15 |

## 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 is required. This document is Part 1 of GB/T 25936 Rubber and Plastic Crushing Machinery. GB/T 25936 has been published in the following parts. --Part

## 1 Scope

GB/T 25936.1-2024 is Part 1 of the Chinese safety series for rubber and plastics size reduction machinery, and covers blade granulators. A granulator is a rotor of hardened knives turning at speed inside a chamber that an operator has to open to clear a jam, and the machine cannot tell the difference between a sprue and a hand; the accident record for this class of machine is dominated by amputation during clearing and by the interlock that was defeated because the machine took too long to stop. The standard follows the type-C machinery safety structure: it lists the safety requirements and protective or risk reduction

measures for the general case, the mechanical hazards, the noise hazards, the hazards from loss of stability, the electrical hazards and the hazards from neglect of ergonomic principles, then the verification of each of those measures, and finally the information for use - the general requirements, the instruction handbook, the marking and the warning signs. It took effect on 23 August 2024.

This document specifies the safety requirements for the design and manufacture of blade crushers (hereinafter referred to as "crushers") and gives the safety requirements for the safe use of the machine. Instructions for use. This document is applicable to the treatment of the crusher during its life cycle (see

5.4 of GB/T 15706-2012) and during its intended use. All significant hazards, hazardous conditions and hazardous events associated with the crusher in the event of misuse which is reasonably foreseeable by the manufacturer (See Appendix A). This document does not apply to. Feeding or discharging equipment not part of the crusher;- Crusher for processing hazardous or flammable materials. -

## 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. in this document.

GB/T 3767 Acoustics - Determination of sound power level and sound energy level of noise source by sound pressure method - Engineering method for approximate free field above reflecting surface

GB/T 5226.1-2019 Electrical safety of machinery Electrical equipment of machinery Part

## 3 Safety requirements for shredders; --Part

4.Safety requirements for pelletizers. This document replaces GB 25936.1-2012 "Rubber and plastics crushing machinery Part

1.Safety requirements for blade crushers" and Compared with GB 25936.1-2012, in addition to structural adjustments and editorial changes, the main technical changes are as follows: The scope of the document has been changed (see Chapter 1, Chapter 1 of the.2012 edition);

a) The schematic diagram of the blade crusher has been changed (see Figure 1, Figure 1 of the.2012 edition);

b) Added a schematic diagram of a blade crusher with a feeding device (see Figure 2);

- c) The requirements for crushing chamber have been changed (see 4.2.1, 5.2.1 of the.2012 edition);
- d) Added the requirements for the performance level PL r of the safety-related parts of the control system (see 4.2.1.2, 4.2.2.1.5, 4.2.3, 4.5.6);
- e) The requirements for entry through openings have been changed (see 4.2.1.2, 5.2.1.2 of the.2012 edition);
- f) The requirements for feeding area have been changed (see 4.2.2, 5.2.2 of the.2012 edition);
- g) Added the requirement that the feed opening should be higher than 0.4m and wider than 0.5m (see 4.2.2.1.2);
- h) Added requirements for discharge area (see 4.2.3);
- i) The requirements for noise control measures have been changed (see 4.3.2.2,