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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 35077-2025

Replacing GB/T 35077-2018

Safety of machinery - Local exhaust ventilation system - Safety requirements

机械安全 局部排气通风系统 安全要求

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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/T 35077-2018 "Safety requirements for local exhaust ventilation systems for machinery safety" and GB/T 35077- Compared with 2018, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Changed the scope of inapplicability of the document (see Chapter 1, Chapter 1 of the 2018 edition);

- Change the terms "inlet coefficient", "air collection hood", "air collection flow" and "user" to "exhaust hood resistance coefficient", "exhaust hood", "exhaust Airflow" and "user" (see 3.3, 3.7, 3.8 and 3.12, 3.6, 3.10, 3.11 and 3.21 of the 2018 edition); "average" was deleted balance", "deflector", "branch", "capture velocity", "surface wind speed", "loss coefficient", "main pipe", "slot velocity", "system operating point The terms and definitions of "System Operation Permit" and "System Efficiency Loss" (see 3.3, 3.4, 3.5, 3.8, 3.12, 3.14, 3.15, 3.18, 3.19, 3.20);

- Changed the technical content of "Basic Requirements" (see Chapter 4, Chapter 4 of the 2018 edition);

- Changed the technical content of "Structure and layout" (see Chapter 5, 5.1, 5.2, 5.3 of the 2018 edition);

- Deleted the relevant provisions on factory building renovation in structure and layout (see 5.4 of the 2018 edition);

- Changed the technical requirements for exhaust hoods (see 6.1, 6.2, 6.4, 6.5, 6.7, 7.1, 7.3, 7.4, 7.6, 7.8, 7.12 of the 2018 edition);

- Deleted the requirements for the use and monitoring of exhaust hoods (see 7.5, 7.10, 7.11 of the 2018 edition);

- Changed the technical requirements for pipes and exhaust pipes (see 7.1.2, 7.1.3, 7.1.4, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 2018 edition 8.3, 8.4, 8.5, 8.8, 8.9, 8.10);

- Added technical requirements for pipelines for transporting hot particles and requirements that pipelines should not be concealed (see 7.1.6, 7.1.8);

- Added requirements for lightning protection of exhaust ports and metal mesh screens (see 7.2.5, 7.2.6);

- Deleted the requirements for personnel and layout of pipeline design (see 8.1 and 8.7 of the 2018 edition);

- Changed the technical requirements for air purification equipment (see 8.1, 8.2, 8.4, 9.1

and 9.2 of the 2018 edition);

- Deleted the requirements for the use of purification equipment and waste treatment requirements (see 9.3 and 9.4 of the 2018 edition);

- Added technical requirements for air purification equipment for treating combustible pollutants (see 8.3, 8.5, 8.6);

- Changed the technical requirements for fans (see 9.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.11, 9.12, 10.1, 10.2, 2018 edition 10.5, 10.6, 10.7, 10.8, 10.11);

- Deleted the requirements for fan system operating points, operation and maintenance, and metal mesh screens (see 10.3, 10.4, and 10.9 of the 2018 edition);

- Added requirements for fans that handle combustible pollutants and requirements for connections between fans and pipes (see 9.6, 9.9);

- Changed the technical requirements for the make-up air system (see 10.1, 10.2, 10.4, 10.5, 10.6, 10.9, 10.10, 6.1, 2018 edition 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10);

- Deleted the requirements for supplementary air for personnel comfort and the requirements for supplementary air as propulsion air (see the 2018 edition 6.11, 6.12, 6.13);

- Added requirements for the location of the supplementary air inlet and the requirements for heating the supplementary air (see 10.3, 10.7, 10.8, 10.10);

- Added relevant requirements for "control systems" (see Chapter 11);

- Added relevant requirements for "information for use" (see Chapter 12);

- Added the normative appendix "Requirements for the selection of flame arresters, breathing valves or emergency relief valves" (see Appendix C).

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 National Technical Committee for Machinery Safety Standardization (SAC/TC208).

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This document was first published in 2018 and this is the first revision.

Introduction

The structure of safety standards in the field of machinery is as follows.

- Category A standards (basic safety standards) give basic concepts, design principles and general characteristics applicable to all machinery;

- Class B standards (general safety standards) involve a safety feature in a machine or a type of safety device with a wider range of use.

- Category B1, safety features (such as safety distance, surface temperature, noise) standards;

- Category B2, safety device (such as two-hand control device, interlock device, pressure