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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 16668-2025

General technical specifications for powder extinguishing system and components

干粉灭火系统及部件通用技术条件

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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 16668-2010 "General Technical Specifications for Dry Powder Fire Extinguishing Systems and Components". In addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) Added the terms "Class D dry powder fire extinguishing system" and "constant pressure actuated device" and their definitions (see

b) The relevant content of classification has been changed (see Chapter 4, Chapter 4 of the.2010 edition);

c) The relevant contents of model compilation have been changed (see Chapter 5, Chapter 5 of the.2010 edition);

d) The relevant content of structural requirements has been changed (see 6.2.2,

6.2.2 of the.2010 edition);

e) The requirements for fire extinguishing agents have been modified (see 6.2.5,

6.2.5 of the.2010 edition);

f) Added relevant content on Class D fire extinguishing performance (see 6.2.8.3);

g) Deleted the content related to the thermal stability of plastic and rubber parts (see

6.3.7 of the.2010 edition);

h) Added relevant content about constant pressure action device (see 6.4);

i) The relevant contents of general requirements have been modified (see 6.5.1,

1 Scope

China's mandatory general technical specification for dry powder extinguishing systems and their components. A powder system floods a space or covers a surface with a fine chemical powder that interrupts the combustion chain reaction rather than cooling or smothering it, which is why it knocks down a flame faster than almost anything else and

why it is used on flammable liquids and on the metal fires nothing else will touch. Its limitations are the reason a specification is needed: powder leaves no residual protection, so a hot surface re-ignites the moment the discharge ends, and the discharge itself is violent enough to scatter a burning liquid if the nozzles are wrongly placed. The standard covers the containers and their pressurisation, the valves and the distribution pipework, the nozzles and their discharge pattern, the detection and actuation, and the discharge time within which the design concentration must be reached.

This document specifies the classification, model compilation, requirements, inspection rules and instruction manual writing requirements of dry powder fire extinguishing systems and components, and describes The corresponding test methods are described. This document applies to the design, manufacture and maintenance of fixed and semi-fixed dry powder fire extinguishing systems and their components (including cabinet dry powder fire extinguishing devices). test.

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 150 Pressure Vessels (all parts)

GB/T 3181-2008 Paint film color standard

GB 4066 Dry powder fire extinguishing agent

GB/T 5099.1 Steel seamless gas cylinders Part

1.Steel cylinders with a tensile strength less than 1100 MPa after quenching and tempering

GB/T 5100 Steel welded gas cylinders

GB/T 9969 General principles for instructions for use of industrial products GB 19156 Fire Monitor

GB 19157 General technical requirements for remote-controlled fire monitor systems GB 25200 Dry powder gun

GB 25972-2024 Gas fire extinguishing systems and components

JB/T 9273 Electric contact pressure gauge XF

61 General technical requirements for drive and control devices of fixed fire extinguishing systems XF578 ultrafine dry powder fire extinguishing agent XF979 Class D dry powder fire extinguishing agent