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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 28009-2025

Replacing GB/T 28009-2011

Code of safety practice for cold store

冷库安全规程

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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 replaces GB/T 28009-2011 "Safety Regulations for Cold Storage". Compared with GB/T 28009-2011, the only changes are structural adjustments and editing.

Aside from the sexual alterations, the main technical changes are as follows.

a) The scope of application has been changed (see Chapter 1, Chapter 1 of the 2011 edition);

b) Added terminology requirements defined in GB/T 9237-2017 and GB 50072 (see Chapter 3);

c) The following terms already defined in GB 50072 have been removed. cold storage, prefabricated cold storage, warehouse, refrigeration room, refrigeration equipment, and refrigeration system.

Refrigeration systems, including direct refrigeration systems, indirect refrigeration systems, refrigeration compressors, and refrigeration auxiliary equipment (see 3.1-3.10 of the 2011 edition);

d) The term "indoor prefabricated cold storage" and its definition have been added (see 3.1);

e) Increased requirements for cold storage construction sites (see Chapter 4);

f) Increased safety requirements for thermal insulation materials (see Chapter 4);

g) Increased requirements for indoor prefabricated cold storage (see Chapter 4, 5.1.2, 5.4.7, 6.3.9, 7.9 and 7.10);

h) Additional requirements for carbon dioxide refrigerant have been added (see 5.2.5, 5.3.4, 8.3.1.3, and 8.3.3.3);

i) The requirements for emergency ventilation systems have been changed (see 5.2.5, 7.2 of the 2011 edition);

j) Requirements for ammonia discharge via pressure relief pipes have been added (see 5.3.3);

k) The requirement to install shut-off devices on ammonia liquid pipelines has been added (see 5.3.9);

l) The requirements for lighting fixtures in cold rooms have been changed (see 5.4.1, 7.8 of the 2011 edition);

m) The requirements for electrical wiring passing through warehouse insulation have been changed (see 5.4.5, 7.11 of the 2011 edition);

n) Protection requirements for the electric heating device inside the warehouse have been added (see 5.4.8);

o) Added requirements for design document review (see 5.5);

p) Added basic requirements for equipment selection and configuration (see 6.1);

q) Added requirements for forklift charging (see 6.3.8);

r) Added requirements for the use of lithium-ion power batteries in the warehouse (see 6.3.10);

s) Added review requirements for equipment selection and configuration (see 6.4);

t) The requirements for safety measures and facilities at construction sites have been changed (see 7.1, 7.4~7.10, and 8.1~8.4 in the 2011 edition);

u) Increased the qualification and contracting requirements for cold storage construction companies (see 7.2 and 7.3);

v) Increased operational requirements for corrosion protection and insulation of refrigeration pipes (see 7.11);

w) Added installation requirements for the in-warehouse electric heating device (see 7.12);

x) Increased requirements for manual on-duty personnel in ammonia-related cold storage facilities (see 8.1.9);

y) Increased connection requirements between the ammonia filling station and the liquid ammonia transport container (see 8.3.3.6);

z) Increased the corrosion resistance requirements for condenser cleaning agents (see 8.3.6.10);

aa) Increased requirements for the use of safety signs (see 8.4);

bb) Added relevant requirements for the cessation of cold storage operations and their scrapping (see 8.5);

cc) added requirements for the dismantling of cold storage facilities (see Chapter 9).

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 National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Refrigeration Standardization (SAC/TC119).

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The document replaced by this document has been released in the following versions.

- First published in 2011 as GB 28009-2011;

- In 2017, the standard number was changed to GB/T 28009-2011 (according to the 7th National Standard Announcement of 2017 and the mandatory standards).

Based on the simplified conclusions, effective March 23, 2017, this standard was converted into a recommended standard and is no longer mandatory.

- This is the first revision.