

ICS 27.160
CCS F 12



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

GB/T 46193-2025

**Technical requirements for vertical cylindrical molten salt
storage tank**

立式圆筒形熔融盐储罐技术要求

Issued on: October 5, 2025

Implemented on: May 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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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.

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This document was proposed by the China Electricity Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Solar Thermal Power Generation (SAC/TC565).

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Technical requirements for vertical cylindrical molten salt storage tanks

1 Scope

This document specifies the general requirements, technical requirements, testing and inspection, marking, and document delivery for vertical cylindrical molten salt storage tanks.

This document applies to single-layer vertical cylindrical molten salt (nitro type) storage tanks in dual-tank sensible heat storage systems of solar thermal power plants. Other types...

The vertical cylindrical molten salt (nitro type) storage tank is used as a reference for the use of the dual-tank sensible heat storage system.

2 Normative references

GB/T 713.1

GB/T 713.2

GB/T 40104

GB/T 41308

GB 50264

GB/T 51307

3 Terms and Definitions

The terms and definitions defined in GB/T 40104, GB/T 51307 and GB/T 41308, as well as the following terms and definitions, apply to this document.

3.1

Liquid level in a hot molten salt storage tank when the system is in a fully exothermic state; liquid level in a cold molten salt storage tank when the system is in a fully charged state.

3.2

Liquid level in a hot molten salt storage tank when the system is fully heated; liquid level in a cold molten salt storage tank when the system is fully deheated.

3.3 Design liquid level

The normal operating level plus the design margin.

Note. The design margin for liquid level mainly takes into account factors such as liquid level fluctuations caused by pipeline desalination, pump start-up and shutdown, and valve opening and closing.

3.4 Effective volume netliquidcapacity

The volume of the molten salt storage tank between the normal operating level and the minimum operating level.

3.5 Maximum storage capacity

The volume of a molten salt storage tank between the design liquid level and the bottom of the tank.