



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

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**Technical code for low temperature steel storage tanks in
petrochemical engineering**

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Table of Contents

Foreword	6
1 General provisions	8
2 Terms	9
3 Basic requirements	11
3.1 Tank type	11
3.2 General requirements	15
4 Material	18
4.1 General requirements	18
4.2 Metal tanks	18
4.3 Concrete	23
5 Metal parts design	25
5.1 General requirements	25
5.2 Primary and secondary container	27
5.3 Vapor container	33
5.4 Suspend roof	38
5.5 Pipe	38
5.6 Bottom of primary and secondary container	40
5.7 Primary and secondary container connection	41
5.8 Other requirements	41
6 Concrete components design	42
6.1 General requirements	42
6.2 Liquid tightness	43
6.3 Concrete tanks	44
7 Insulation	47
7.1 Performance characteristics, testing and selection of insulating materials	47
7.2 Outer tank and protection of insulation	48
7.3 Insulation design	49
7.4 Installation	53
8 Metallic parts construction, testing, inspection and acceptance	54
8.1 General requirements	54
8.2 Material management	54
8.3 Shop fabrication	56

8.4 Site installation	57
8.5 Welding	61
8.6 Inspection	65
9 Concrete components construction	71
10 Testing	73
10.1 Hydrostatic test	73
10.2 Pneumatic test	75
Appendix A Primary physical properties of products	78
Appendix B Design information	79
Appendix C Seismic design	81
Appendix D Testing for reinforced steel.....	82
Appendix E Insulation materials and purpose	84
Explanation of wording in this code	86
List of quoted standards	87

Foreword

This specification is, in accordance with the requirements of the requirements of the original Ministry of Construction "Notice on the issuance of 2006 construction standards development and revision plan (second batch)" (Jianbiao [2006] No.136), jointly compiled by the China Petrochemical Corporation and Sinopec Luoyang Engineering Co., Ltd.

In the compilation process, the compilation group conducted extensive investigation and study, conscientiously summed up the practical experience, consulted the foreign advanced standards, collected opinions extensively, completed the draft for approval, and finally finalized the draft.

This specification is divided into 10 chapters and 5 appendixes, AND the main technical content includes. General provisions, terms, basic requirement, materials, metal parts design, concrete components design, insulation, metallic parts construction, testing, inspection and acceptance, concrete components construction, testing, and so on.

As for this specification, the Ministry of Housing and Urban-Rural Development is responsible for its management, the China Petrochemical Corporation is responsible for daily management, AND the SINOPEC Luoyang Engineering Co., Ltd is responsible for the interpretation of the specific technical contents.

Any opinions and suggestions on this specification in the implementation process please send to SINOPEC Luoyang Engineering Co., Ltd. (Address.

No.27 Zhongzhou West Road, Luoyang City, Henan Province, Postal Code.

471003) for future reference during revision.

The responsible drafting unit, participating drafting unit, participating unit, main drafters and the main examiners of this specification are as follows.

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1 General provisions

1.0.1

This specification is hereby established to standardize the design and construction of petrochemical steel low-temperature storage tanks.

1.0.2 This specification applies to the design and construction of the steel

vertical cylindrical aboveground single containment tank, double containment tank and full containment tank which is used to store the hydrocarbons or ammonia of boiling point $0\text{ }^{\circ}\text{C}$ ~ $-165\text{ }^{\circ}\text{C}$ AND for which the design pressure is not more than 50 kPa.

This specification does not apply to thin-film tanks and primary tanks only using prestressed concrete.

1.0.3 The petrochemical steel low-temperature storage tank shall, in addition to the main tanks and its associated components as a whole, also be composed of the following.

1 The connection of tanks and the external pipes shall include the following.

- 1) The groove end surface of the first circumferential joint of the welded connection;
- 2) The end surface of the first threaded joint of the threaded connection;
- 3) The first flange sealing surface of the flanged connection;
- 4) The first sealing surface of the special connection or pipe connecti...