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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 39383-2020

Thermoplastics piping systems for underground non-pressure applications. Test method for leak tightness of elastomeric sealing ring type joints

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this standard is equivalent to ISO 13259.2018 ``Elastic sealing ring joints for buried non-pressure thermoplastic plastic piping systems

Test Method for Sealing Performance of China.

This standard has made the following editorial changes.

---Removed the query URL quoted in terms and definitions;

---The pressure dimension bar (bar) is changed to the legal unit of measurement MPa (megapa) in my country;

---In order to maintain the consistency of the symbols in the standard, change the dn of item d) in Article 8.1 to de;

--- Corresponding to the text of the standard "unless the relevant standards provide otherwise, X should be 10%, Y should be 5%", the formula (1)

X/100 is changed to X, and Y/100 in formula (2) is changed to Y;

--- To be consistent with the formula (2) in 8.2, modify the example in 8.2.lSO=1100-(1100x5/100)=1045mm, and modify it to. lSO

=1100-(1000x5/100)=1050mm.

Please note that certain contents of this document may involve patents. The issuing agency of this document is not responsible for identifying these patents.

This standard was proposed by the China National Light Industry Council.

This standard is under the jurisdiction of the National Standardization Technical Committee

for Plastic Products (SAC/TC48).

Drafting organizations of this standard. Beijing Building Materials Inspection and Research Institute Co., Ltd. (National Water-saving Appliance Product Quality Supervision and Inspection Center), Yonggao

Co., Ltd., Chinaust Plastic Products Co., Ltd., Zhejiang Zhongcai Pipeline Technology Co., Ltd., Baoding Lida Plastic Co., Ltd., North

Beijing Technology and Business University (Light Industry Plastics Processing and Application Research Institute), National Chemical Building Materials Testing Center (Material Testing Department), Tianjin Tianyou Construction

Design Co., Ltd., Shandong Dongxin Plastic Co., Ltd., Hangzhou Unicom Pipe Industry Co., Ltd., Liaocheng University, Baolu Qixing Pipe Industry Co., Ltd.

Division, Chengde Precision Testing Machine Co., Ltd.

1 Scope

This standard specifies the test method for the sealing performance of elastic sealing ring joints of buried non-pressure thermoplastic piping systems.

Unless otherwise specified in the relevant standards, the test is carried out under the following three pressures.

---p1.Internal negative pressure (partial vacuum);

---p2.Lower internal hydrostatic pressure;

---p3.Higher internal hydrostatic pressure.

This standard also specifies the following 4 test conditions.

a) Condition A. No radial deformation and axial deflection;

b) Condition B. There is radial deformation;

c) Condition C. There is an axial deflection angle;

d) Condition D. There is axial deflection and radial deformation.

The test pressure and test conditions shall be implemented in accordance with relevant standards.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

There are no terms and definitions that need to be defined in this document.

4 Principle

Apply the specified internal negative air pressure p1 to the pipe and/or pipe assembly, then apply a lower internal hydrostatic pressure p2, and finally apply

Higher internal hydrostatic pressure p3.

During the test, radial deformation and/or axial deflection of the joint may occur. It can also be tested according to the pressure and conditions specified in the relevant standards.

Each test pressure should be kept constant within a specified time, and joint leakage should be monitored during the pressure holding process (see Chapter 8).

The following test parameters are implemented in accordance with relevant standards.

a) Test pressure p1[see 8.1e)], p2[see 8.1g)] and p3[see 8.1h)], where applicable, also include the percentage of vacuum loss [see

8.1e)];

b) The required radial deformation, axial deflection angle or a combination thereof, and test pressure.

5.1 General requirements

The test equipment includes fixtures or other devices and should meet the following requirements.