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Thermoplastics piping systems for underground non-pressure applications — Test method for leaktightness of elastomeric sealing ring type joints

Systèmes de canalisations en thermoplastiques pour applications enterrées sans pression — Méthode d'essai d'étanchéité des assemblages à bague d'étanchéité en élastomère

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 138, *Plastic pipes, fittings and valves for the transport of fluids*, Subcommittee SC 1, *Plastics pipes and fittings for soil, waste and drainage (including land drainage)*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping systems and ducting systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 13259:2018), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

— in 8.2, the text was clarified and a calculation error was corrected.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Thermoplastics piping systems for underground non-pressure applications — Test method for leaktightness of elastomeric sealing ring type joints

1 Scope

This document specifies a test method for determining the leaktightness of elastomeric sealing ring type joints for buried thermoplastics non-pressure piping systems.

Unless otherwise specified in the referring standard, the tests are carried out at the following basic test pressures:

— p_1: internal negative air pressure (partial vacuum);

— p_2: a low internal hydrostatic pressure;

— p_3: a higher internal hydrostatic pressure.

It also describes the following four test conditions under which the tests are performed:

a) Condition A: without any additional diametric or angular deflection;

b) Condition B: with diametric deflection;

c) Condition C: with angular deflection;

d) Condition D: with simultaneous angular and diametric deflection.

The applicable selection of the test pressure(s) and the test condition(s) is/are specified in the referring standard.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Principle

A test piece assembled from pipes and/or fittings is subjected to a specific initial internal negative air pressure, p_1, followed by a low specific initial internal hydrostatic pressure, p_2, and a higher internal hydrostatic pressure, p_3.

During testing the joint may be subjected to diametric and/or angular deflection(s). The referring product standard shall specify which of the test pressures and deflection conditions have to be carried out.

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