

# SLOVENSKI STANDARD oSIST prEN ISO 3503:2013

01-oktober-2013

### Cevni sistemi iz polimernih materialov - Mehanski spoji med fitingi in tlačnimi cevmi - Metoda za preskus tesnjenja spojev, ki so obremenjeni z notranjim tlakom in podvrženi upogibu (ISO/DIS 3503:2013)

Plastics piping systems - Mechanical joints between fittings and pressure pipes - Test method for leaktightness under internal pressure of assemblies subjected to bending (ISO/DIS 3503:2013)

Kunststoff-Rohrleitungssysteme - Mechanische Verbindungen zwischen Fittings und Druckrohren - Prüfverfahren für die Dichtheit von Verbindungen bei Innendruck und gleichzeitiger Biegebeanspruchung (ISO/DIS 3503:2013)

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Systèmes de canalisations en plastique - Assemblages mécaniques entre raccords et tubes sous pression - Méthode d'essai pour l'étanchéité sous pression interne de montages soumis à une courbure (ISO/DIS 3503:2013)

## Ta slovenski standard je istoveten z: prEN ISO 3503

ICS:

23.040.60 Prirobnice, oglavki in spojni Flanges, couplings and joints elementi

oSIST prEN ISO 3503:2013

en

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<u>SIST EN ISO 3503:2015</u> https://standards.iteh.ai/catalog/standards/sist/63719818-05e5-421f-85c1-4648053c2984/sist-en-iso-3503-2015

# DRAFT INTERNATIONAL STANDARD ISO/DIS 3503

ISO/TC 138/SC 5

Voting begins on: **2013-08-22** 

Secretariat: NEN

Voting terminates on: 2014-01-22

# Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for leaktightness under internal pressure of assemblies subjected to bending

Assemblages entre raccords et tubes sous pression en polyéthylène (PE) — Essai d'étanchéité à la pression intérieure lorsqu'ils sont soumis à une courbure

[Revision of first edition (ISO 3503:1976)]

ICS: 23.040.60

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## **ISO/CEN PARALLEL PROCESSING**

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.



Reference number ISO/DIS 3503:2013(E)

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## Foreword

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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 3503 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 5, *General properties of pipes, fittings and valves of plastic materials and their accessories -- Test methods and basic specifications*.

This second edition cancels and replaces the first edition (ISO 3503:1976), which has been technically revised.

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### DRAFT INTERNATIONAL STANDARD

# Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for leaktightness under internal pressure of assemblies subjected to bending

#### 1 Scope

This International Standard specifies a method for checking the leaktightness under internal pressure of assembled joints (excluding fusion welded joints) between mechanical fittings and thermoplastic pressure pipes when subjected to bending. It defines the calculation methods for the average bending radius and how to perform this bending.

Checking of the leaktightness under internal pressure is carried out in accordance with the method given in ISO 3458.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 3458, Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for leaktightness under internal pressure

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The test parameters of the corresponding product standards shall be used and the requirements shall be fulfilled.

#### 4 Principle

Checking the leaktightness of joints of an assembly with one pipe and two connected end fittings, to which bending is applied according to its free length (L).

This bending has an average radius calculated from the pipe nominal diameter and pressure.

#### **5** Apparatus

A suitable apparatus is given in Figure 1.

#### 5.1 Bending gauge

Having a bearing length (l) equal to three-quarters of the free length between fittings, i.e. equal to 7,5 times the pipe nominal outside diameter.

This bearing length (*l*) shall have a bending radius equal to 20 times the nominal outside diameter.