



SLOVENSKI STANDARD

SIST-TS CEN/TS 12666-2:2006

01-april-2006

Cevni sistemi iz polimernih materialov za odpadno vodo in kanalizacijo, ki delujejo po težnostnem principu in so položeni v zemljo – Polietilen (PE) – 1. del: Navodilo za ugotavljanje skladnosti

Plastics piping systems for non-pressure underground drainage and sewerage - Polyethylene (PE) - Part 2: Guidance for the assessment of conformity

iTeh STANDARD PREVIEW

Kunststoff-Rohrleitungssysteme für erdverlegte Abwasserkanäle und -leitungen - Polyethylen (PE) - Teil 2: Empfehlungen für die Beurteilung der Konformität

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Systemes de canalisations en plastique pour les branchements et les collecteurs d'assainissement sans pression enterrés - Polyéthylène (PE) - Partie 2: Guide pour l'évaluation de la conformité

Ta slovenski standard je istoveten z: CEN/TS 12666-2:2005

ICS:

23.040.01	Deli cevovodov in cevovodi na splošno	Pipeline components and pipelines in general
91.140.80	Drenažni sistemi	Drainage systems
93.030	Zunanji sistemi za odpadno vodo	External sewage systems

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TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 12666-2

December 2005

ICS 23.040.01; 91.140.80

English Version

**Plastics piping systems for non-pressure underground drainage
and sewerage - Polyethylene (PE) - Part 2: Guidance for the
assessment of conformity**

Systèmes de canalisations en plastique pour les
branchements et les collecteurs d'assainissement sans
pression enterrés - Polyéthylène (PE) - Partie 2: Guide pour
l'évaluation de la conformité

Kunststoff-Rohrleitungssysteme für erdverlegte
Abwasserkanäle und -leitungen - Polyethylen (PE) - Teil 2:
Empfehlungen für die Beurteilung der Konformität

This Technical Specification (CEN/TS) was approved by CEN on 4 October 2002 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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Foreword

This Technical Specification (CEN/TS 12666-2:2005) has been prepared by CEN /TC 155, "Plastics piping systems and ducting systems", the secretariat of which is held by NEN.

This Technical Specification can be used to support elaboration of national third party certification procedures for products conforming to EN 12666-1:2005.

This Technical Specification (TS) is a Part of a System Standard for plastics piping systems of a particular material for a specified application. There are a number of such System Standards.

System Standards are based on the results of the work undertaken in ISO/TC 138 "*Plastics pipes, fittings and valves for the transport of fluids*", which is a Technical Committee of the International Organization for Standardization (ISO).

They are supported by separate standards on test methods to which references are made throughout the System Standard.

The System Standards are consistent with general standards on functional requirements and on recommended practice for installation.

EN 12666 consists of the following Parts, under the general title *Plastics piping systems for non-pressure underground drainage and sewerage — Polyethylene (PE)*

- *Part 1: Specifications for pipes, fittings and the system*
- *Part 2: Guidance for assessment of conformity (the present TS)*
- *Part 3: Guidance for installation (TS under preparation)*

This document includes a Bibliography.

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CEN/TS 12666-2:2005 (E)

1 Scope

This Part of EN 12666 gives guidance for the assessment of conformity to be included in the manufacturer's quality plan as part of the quality system.

This Technical Specification includes:

- a) requirements for materials, components, joints and assemblies given in EN 12666-1;
- b) requirements for the manufacturer's quality system;

NOTE 1 It is recommended that the quality system conforms to EN ISO 9001:2000^[1].

- c) definitions and procedures to be applied if third party certification is involved.

NOTE 2 If third party certification is involved, it is recommended that the certification body is accredited to EN 45011^[2] or EN 45012^[3], as applicable.

It is applicable to piping systems made of polyethylene (PE) in the field of non-pressure underground drainage and sewerage outside the building structure (application area code "U") and for non-pressure underground drainage and sewerage for both buried in the ground within the building structure (application area code "D") and outside the building structure. This is reflected in the marking of products by "U" and "UD".

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12666-1:2005, *Plastics piping systems for non-pressure underground drainage and sewerage — Polyethylene (PE) — Part 1: Specifications for pipes, fittings and the system*.

EN ISO 9000, *Quality management systems – Fundamentals and vocabulary (ISO 9000:2000)*.

3 Definitions, symbols and abbreviations

For the purposes of this Technical Specification, the terms and definitions, symbols and abbreviations given in EN 12666-1:2005 apply together with the following.

3.1 Terms and definitions

3.1.1

certification body

impartial body, governmental or non-governmental, possessing the necessary competence and responsibility to carry out certification of conformity according to given rules of procedure and management

3.1.2

inspection body

impartial organization or company, approved by the certification body as possessing the necessary competence to verify and/to carry out initial type testing, audit testing and inspection of the manufacturer's factory production control in accordance with the relevant European Standard

3.1.3

testing laboratory

laboratory which measures, tests, calibrates or otherwise determines the characteristics of the performance of materials and products

3.1.4**quality system**

organizational structure, responsibilities, procedures, processes and resources for implementing quality management (see EN ISO 9000)

3.1.5**quality plan**

document setting out the specific quality practices, resources and sequence of activities relevant to a particular product or range of products

3.1.6**type testing (TT)**

testing performed to prove that the material, component, joint or assembly is capable of conforming to the requirements given in the relevant standard

3.1.6.1**preliminary type testing (PTT)**

type testing carried out by or on behalf of the manufacturer

3.1.6.2**initial type testing (ITT)**

type testing carried out by or on behalf of the certification body for certification purposes

3.1.7**batch release test (BRT)**

test performed by the manufacturer on a batch of components, which has to be satisfactorily completed before the batch can be released

3.1.8**process verification test (PVT)**

test performed by the manufacturer on materials, components, joints or assemblies at specific intervals to confirm that the process continues to be capable of producing components conforming to the requirements given in the relevant standard

NOTE Such tests are not required to release batches of components and are carried out as a measure of process control.

3.1.9**audit test (AT)**

test performed by or on behalf of a certification body to confirm that the material, component, joint or assembly continues to conform with the requirements given in the relevant standard and to provide information to assess the effectiveness of the quality system

3.1.10**indirect test (IT)**

test performed by the manufacturer different from that specified for that particular characteristic, having verified its correlation with the specified test

3.1.11**witness testing (WT)**

testing accepted by a certification body for initial type testing and/or audit testing, which is carried out by, or on behalf of the manufacturer and supervised by a representative of the certification body, qualified in testing

3.1.12**material**

defined type of polymer or additive or constituent thereof

3.1.13**compound (blend)**

recipe which defines types of polymer, additives and constituents at specified dosage levels

CEN/TS 12666-2:2005 (E)**3.1.14****material batch or compound batch**

clearly identifiable quantity of a particular material or compound

3.1.15**production batch**

clearly identifiable collection of units, manufactured consecutively under the same conditions, using material or compound conforming to the same specification

3.1.16**lot**

clearly identifiable sub-division of a batch for inspection purposes

3.1.17**sample**

one or more units of product drawn from a batch or lot, selected at random without regard to quality

NOTE The number of units of product in the sample is the sample size.

3.1.18**group**

collection of similar components from which samples are selected for testing purposes

3.2 Abbreviations

NOTE For reasons of avoiding misunderstanding the following abbreviations are kept the same in each of the languages. For the same reason the terms are given in the three languages ("en" for English, "fr" for French and "de" for German).

AT en: audit test

fr: essai d'audit

de: Überwachungsprüfung

BRT en: batch release test

fr: essai de libération de campagne de fabrication

de: Freigabepfung einer Charge

IT en: indirect test

fr: essai indirect

de: indirekte Prüfung

ITT en: initial type testing

fr: essais de type initiaux

de: Erst-Typprüfung

PTT en: preliminary type testing

fr: essais de type préliminaires

de: vorausgehende Typprüfung

PVT en: process verification testing

fr: essai de vérification du procédé de fabrication

de: Prozessüberprüfung

TT en: type test

fr: essai de type

de: Typprüfung

WT en: witness testing

fr: essais de témoins

de: Prüfung unter Aufsicht

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4 Requirements

4.1 General

4.1.1 Materials, components, joints and assemblies shall conform to the requirements given in EN 12666-1.

4.1.2 Components and/or assemblies shall be produced by the manufacturer under a quality system which includes a quality plan.

4.2 Testing and inspection

4.2.1 Material specification

For the purpose of this Technical Specification the material specification consists of a recipe/compound having a polyethylene with specific product name and additives with known dosage level.

4.2.2 Grouping

For the purposes of this Technical Specification the following groups shall apply.

4.2.2.1 Size group

A group of nominal sizes DN. Four size groups are designated as follows:

- Size group 1: 110, 125, 160, 200;
- Size group 2: 250, 315, 355, 400, 450, 500;
- Size group 3: 630, 800, 1000;
- Size group 4: 1200, 1400, 1600.

4.2.2.2 Fitting group [https://standards.iteh.ai/catalog/standards/sist/671d4996-4147-4af2-bdc9-](https://standards.iteh.ai/catalog/standards/sist/671d4996-4147-4af2-bdc9-a136d09b5be/sist-ts-cen-ts-12666-2-2006)

A group of fitting types having a similar design. Three fitting groups are designated as follows:

- Fitting group 1: Bends;
- Fitting group 2: Branches;
- Fitting group 3: Other fittings.

Push fit fittings and fusion fittings shall be considered separately for each group.

4.2.3 Type tests (TT)

4.2.3.1 General

Type tests shall demonstrate that products conform to all requirements for the characteristics given in Tables 1, 2 and 3, as applicable.

In addition relevant type tests shall be carried out whenever there is a change in design, material and/or in the production method, other than routine in-process adjustments and to extensions of the product range as indicated in the same tables.

In case of change of material the type testing can be carried out by the manufacturer on the characteristics specified for such occasions in column M of the Tables 1, 2 and 3. A PVT shall be made within 6 months to verify the result of the TT.