

SLOVENSKI STANDARD

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Nadomešča:

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Cevni sistemi iz polimernih materialov za oskrbo z vodo ter za podzemno in nadzemno odvodnjavanje in kanalizacijo - Nemehčan polivinilklorid (PVC-U) - 7. del: Navodilo za ugotavljanje skladnosti

Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 7: Guidance for the assessment of conformity

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Kunststoff-Rohrleitungssysteme für die Wasserversorgung und für erdverlegte und nicht erdverlegte Entwässerungs- und Abwasserdruckleitungen - Weichmacherfreies Polyvinylchlorid (PVC-U) - Teil 7: Empfehlungen für die Beurteilung der Konformität

Systèmes de canalisations en plastique pour l'alimentation en eau, pour branchements et collecteurs d'assainissement enterrés et aériens avec pression - Poly(chlorure de vinyle) non plastifié (PVC-U) - Partie 7: Guide pour l'évaluation de la conformité

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23.040.01	Deli cevovodov in cevovodi na splošno	Pipeline components and pipelines in general
91.140.60	Sistemi za oskrbo z vodo	Water supply systems
93.030	Zunanji sistemi za odpadno vodo	External sewage systems

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CEN/TS 1452-7

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ICS 91.140.60

Supersedes CEN/TS 1456-2:2003, ENV 1452-7:2000

English Version

**Plastics piping systems for water supply and for buried and
above-ground drainage and sewerage under pressure -
Unplasticized poly(vinyl chloride) (PVC-U) - Part 7: Guidance for
the assessment of conformity**

Systèmes de canalisations en plastique pour l'alimentation en eau, pour branchements et collecteurs d'assainissement enterrés et aériens avec pression - Poly(chlorure de vinyle) non plastifié (PVC-U) - Partie 7: Guide pour l'évaluation de la conformité

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This Technical Specification (CEN/TS) was approved by CEN on 9 December 2013 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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (CEN/TS 1452-7:2014) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

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

This document supersedes ENV 1452-7:2000, CEN/TS 1456-2:2003, which have been technically revised.

EN ISO 1452, *Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure — Unplasticized poly(vinyl chloride) (PVC-U)*, consists of the following parts:

- *Part 1: General*
- *Part 2: Pipes*
- *Part 3: Fittings*
- *Part 4: Valves*
- *Part 5: Fitness for purpose of the system*

This part of EN ISO 1452 gives guidance for the assessment of conformity of compounds/formulations, products, joints and assemblies in accordance with the applicable parts of EN ISO 1452 intended to be included in the manufacturer's quality plan as part of the quality management system and for the establishment of certification procedures:

Part 7: Guidance for the assessment of conformity.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Figures 1 and 2 are intended to provide general information on the concept of testing and organization of those tests used for the purpose of the assessment of conformity. For each type of tests (i.e. type testing (TT), batch release test (BRT), process verification test (PVT) and audit test (AT), this part of EN ISO 1452 details the applicable characteristics to be assessed as well as the frequency and sampling of testing.

A typical scheme for the assessment of conformity of compounds/formulations, pipes, fittings, valves, joints or assemblies by manufacturers is given in Figure 1.

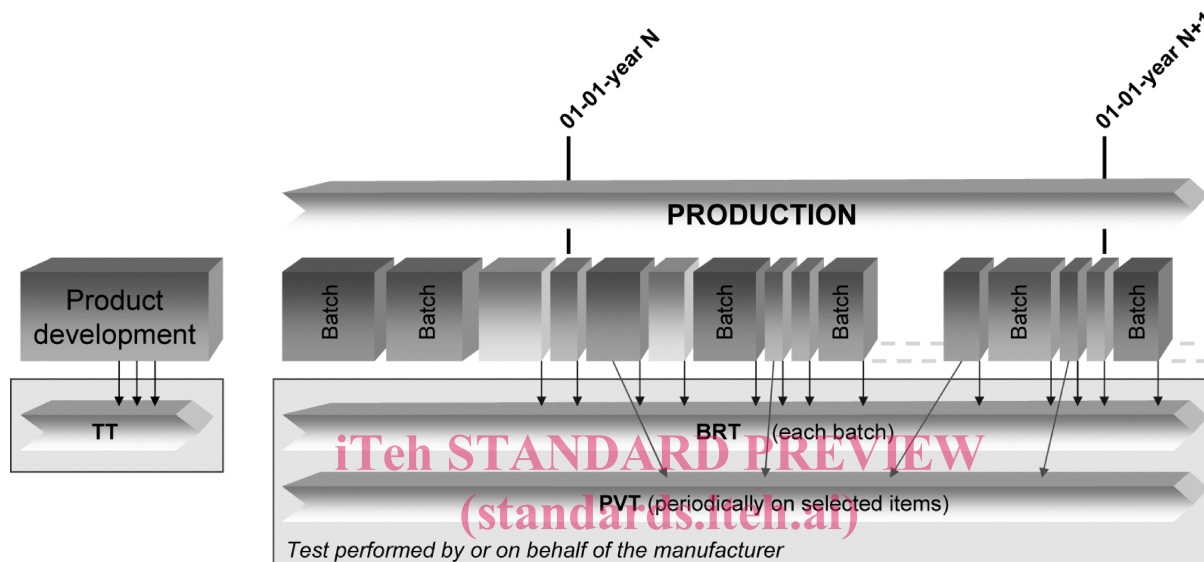


Figure 1 — Typical scheme for the assessment of conformity by a manufacturer

A typical scheme for the assessment of conformity of compounds/formulations, pipes, fittings, valves, joints or assemblies by manufacturers, including a certification, is given in Figure 2.

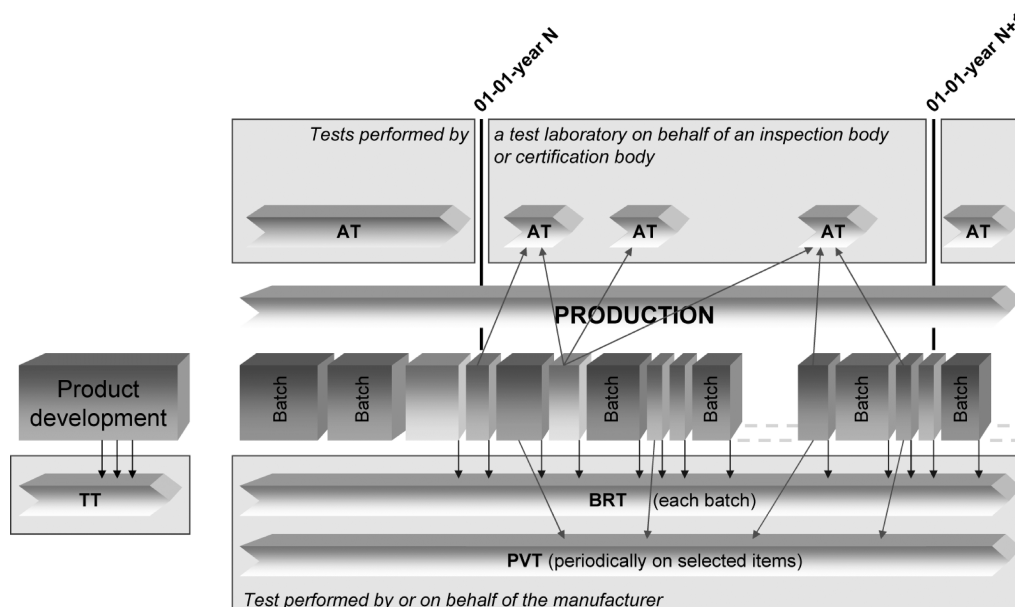


Figure 2 — Typical scheme for the assessment of conformity by a manufacturer, including a certification

1 Scope

This part of EN ISO 1452 gives guidance for the assessment of conformity of compounds/formulations, products, joints and assemblies in accordance with the applicable parts of EN ISO 1452 intended to be included in the manufacturer's quality plan as part of the quality management system and for the establishment of certification procedures.

NOTE 1 It is recommended that the quality management system conforms to or is no less stringent than the relevant requirements to EN ISO 9001 [1].

NOTE 2 If certification is involved, the certification body and inspection body is preferably compliant with EN ISO/IEC 17065 [5] or EN ISO/IEC 17021 [3], as applicable.

In conjunction with Parts 1 to 5 of EN ISO 1452 (see Foreword) this document is applicable to unplasticized poly(vinyl chloride) (PVC-U) plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure.

2 Normative references

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

EN ISO 1452-1:2009, *Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 1: General* (ISO 1452-1:2009)

EN ISO 1452-2:2009, *Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 2: Pipes* (ISO 1452-2:2009)

EN ISO 1452-3:2010, *Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 3: Fittings* (ISO 1452-3:2009, corrected version 2010-03-01)

EN ISO 1452-4:2009, *Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 4: Valves* (ISO 1452-4:2009)

EN ISO 1452-5:2010, *Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 5: Fitness for purpose of the system* (ISO 1452-5:2009, corrected version 2010-03-01)

3 Terms and definitions

For the purposes of this document, the following terms and definitions given in EN ISO 1452-1:2009, EN ISO 1452-2:2009, EN ISO 1452-3:2010, EN ISO 1452-4:2009 and the following apply.

3.1

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

Note 1 to entry: A certification body is preferably compliant with EN ISO/IEC 17065 [5].

3.2

inspection body

body that performs inspection

Note 1 to entry: A body can be an organization or part of an organization.

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Note 2 to entry: An inspection body is preferably compliant with EN ISO/IEC 17020 [2].

3.3
testing laboratory
 laboratory which measures, tests, calibrates or otherwise determines the characteristics of the performance of materials and products

Note 1 to entry: In the context of this part of EN ISO 1452, the materials and products can be subject to type testing, batch release testing, process verification testing, audit testing and witness testing, as applicable.

Note 2 to entry: A testing laboratory is preferably compliant with EN ISO/IEC 17025 [4].

3.4
quality management system
 management system to direct and control an organization with regard to quality

Note 1 to entry: Requirements for quality management systems are given in EN ISO 9001 [1].

3.5
quality plan
 document setting out the specific quality practices, resources and sequence of activities relevant to a particular product or range of products

3.6
type test
TT
 test performed to prove that the material, product, joint or assembly is capable of conforming to the requirements given in the relevant standard

Note 1 to entry: The type test results remain valid until there is a change in the material or product or assembly, provided that the process verification tests are done regularly.

3.7
batch release test
BRT
 test performed by or on behalf of the manufacturer on a batch of formulation/compound or products, which has to be satisfactorily completed before the batch can be released

3.8
process verification test
PVT
 test performed by or on behalf of the manufacturer on formulation/compound or products or joints or assemblies at specific intervals to confirm that type test originally performed on these formulation/compound or products or joints or assemblies continue to be valid and that the process continues to be capable of producing products which conform to the requirements given in the relevant standard

Note 1 to entry: Such tests are not required to release batches of formulation/compound or products and are carried out as a measure of process control.

3.9
audit test
AT
 test performed by a test laboratory on behalf of an inspection body or certification body to confirm that the formulation/compound, product, joint or assembly continues to conform to the requirements given in the relevant standard and to provide information to assess the effectiveness of the quality management system

3.10**indirect test****IT**

test performed by or on behalf of the manufacturer, different from that specified test for that particular characteristic, having previously verified its correlation with the specified test

3.11**witness test****WT**

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

3.12**material**

generic term for compositions (compounds/formulations) grouped by families, expressed by generic names, e.g. polypropylene, stainless steel, brass or EPDM

Note 1 to entry: Definition from European Commission, Directorate-General for Enterprise and Industry, Sub-group on Product Testing Procedures (EC, DG ENT and IND, SG PTP).

3.13**compound/formulation**

clearly defined homogenous mixture of base polymer with additives, e.g. anti-oxidants, pigments, stabilizers and others, at a dosage level necessary for the processing and the intended use of the final product

Note 1 to entry: In water and food contact regulations, the term "composition" is often used instead of compound or formulation.

3.14**material batch**

clearly identified quantity of a given homogeneous compound/formulation manufactured under uniform conditions and defined and identified by the compound/formulation manufacturer

3.15**product**

pipe, fitting, or valve of a clearly identified type intended to be a part of a piping system which the manufacturer puts on the market

3.16**product batch**

clearly identified collection of products, manufactured consecutively or continuously under the same conditions, using the same compound/formulation conforming to the same specification

Note 1 to entry: The production batch is defined and identified by the product manufacturer.

3.17**lot**

clearly identifiable sub-division of a batch for inspection purposes

3.18**sample**

one or more products drawn from the same production batch or lot, selected at random without regard to their quality

Note 1 to entry: The number of products in the sample is the sample size.

CEN/TS 1452-7:2014 (E)**3.19****group**

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

3.20**component**

part of a product manufactured out of a specific composition (compound/formulation), brought to the market as part of another product or as a spare part

Note 1 to entry: For drinking water application, components may be considered as products and be individually approved (e.g. o-ring, gasket) or they are tested as integral part of a finished product (e.g. in a valve).

3.21**joint**

connection between two products

3.22**assembled product**

assembled final product using two or more single parts

3.23**assembly**

unit of two or more products assembled for testing purposes

3.24**sampling plan**

specification of the type of sampling to be used combined with the operational specification of the entities or increments to be taken, the samples to be constituted and the measurements to be made

EXAMPLE A specific plan which indicates the number of units of products or assemblies to be inspected.

3.25**product type**

generic description of a product

EXAMPLE A pipe or fitting or valve or their main parts, of the same design, from a particular compound/formulation.

3.26**body type**

generic description of a body

EXAMPLE A valve body of a particular design, which can have different end connections.

3.27**cavity**

(moulding) space within a mould to be filled to form the moulded product

EXAMPLE That part of an injection mould which gives the form to the injection-moulded product.

4 Abbreviated terms

To avoid misunderstanding, the abbreviations in this clause are defined as being the same in each language. For the same reason, the terms are given in the three languages, English, French and 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 : Freigabeprüfung einer Charge

IT en : indirect test
fr : essai indirect
de : indirekte Prüfung

PVT en : process verification test
fr : essai de vérification du procédé de fabrication
de : Prozessüberprüfung

TT en : type test
fr : essai de type
de : Typprüfung

WT en : witness test
fr : essai témoin
de : Prüfung unter Aufsicht

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5 General

5.1 Materials, products, joints and assemblies shall conform to the requirements given in EN ISO 1452-1, EN ISO 1452-2, EN ISO 1452-3, EN ISO 1452-4 or EN ISO 1452-5.

5.2 Products and assemblies shall be produced by the manufacturer under a quality management system which includes a quality plan.

5.3 For products intended to be used for the supply of water for human consumption, attention is drawn to the requirements of National regulations.

6 Testing and inspection

6.1 Grouping

6.1.1 General

For the purposes of this Technical Specification, the groups specified in 6.1.2 and 6.1.3 apply.