

ICS 93.030

English version

**Plastics piping systems for buried and above-ground pressure
systems for water for general purposes, drainage and
sewerage — Polyethylene (PE) — Part 7: Guidance for the
assessment of conformity**

Systèmes de canalisations en plastique pour les
applications générales de transport d'eau, de branchement
et de collecteurs d'assainissement, enterrés sous
pression — Polyéthylène (PE) — Partie 7: Guide pour
l'évaluation de la conformité

Kunststoff-Rohrleitungssysteme für erd- und oberirdisch
verlegte Druckrohrleitungen für Brauchwasser,
Entwässerung und Abwasser — Polyethylen (PE) — Teil 7:
Empfehlungen für die Beurteilung der Konformität

This Technical Specification (CEN/TS) was approved by CEN on 9 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. 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 document CEN/TS 13244-7:2003 has been prepared by Technical Committee 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 the elaboration of national third party certification procedures for products conforming to the applicable Parts of EN 13244.

This Technical Specification 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 being 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 standards on general functional requirements and standards on recommended practice for installation.

EN 13244 consists of the following Parts, under the general title "Plastics piping systems for buried and above-ground pressure systems for water for general purposes, drainage and sewerage — Polyethylene (PE)".

- *Part 1: General*
- *Part 2: Pipes*
- *Part 3: Fittings*
- *Part 4: Valves*
- *Part 5: Fitness for purpose of the system*
- *Part 7: Guidance for the assessment of conformity (this technical specification)*

NOTE It was decided not to publish a Part 6: Recommended practice for installation. Instead, existing national installation practices would be applicable.

This Technical Specification includes the following annexes.

- Annex A (Normative) Change of PE compound.
- Annex B (Normative) Change of design.
- Bibliography.

System Standards for piping systems of other plastics materials used for the conveyance of water, drainage and sewerage under pressure include the following:

EN 1456, *Plastics piping systems for buried and above- ground drainage and sewerage under pressure – Unplasticized poly(vinyl chloride) (PVC-U)*

prEN 14364, *Plastics piping systems for pressure and non-pressure drainage and sewerage — Glass-reinforced thermosetting (GRP) plastics based on polyester resin (UP)*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this CEN Technical Specification : Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The System Standard, of which this is Part 7, specifies the requirements for a piping system and its components made from polyethylene (PE). It is intended to be used for buried and above-ground pressure systems for water for general purposes, drainage and sewerage.

This Part of EN 13244 gives guidance for the procedures and requirements for the assessment of conformity of materials, components, joints and assemblies and is intended to be used by certification bodies, inspection bodies, testing laboratories and manufacturers.

1 Scope

This Part of EN 13244 gives guidance for the assessment of conformity to be included in the manufacturer's quality plan as part of his quality system.

This Technical Specification includes:

- a) requirements for materials, components, joints and assemblies given in Parts 1 to 5 of EN 13244;
- b) requirements for the manufacturer's quality system;

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

In conjunction with one or more Parts of EN 13244 (see Foreword) it is applicable to polyethylene (PE) piping systems intended to be used for buried and above-ground pressure systems for water for general purposes, drainage and sewerage.

2 Normative references

This Technical Specification incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Technical Specification only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 13244-1:2002, *Plastics piping systems for buried and above-ground pressure systems for water for general purposes, drainage and sewerage — Polyethylene (PE) — Part 1: General.*

EN 13244-2:2002, *Plastics piping systems for buried and above-ground pressure systems for water for general purposes, drainage and sewerage — Polyethylene (PE) — Part 2: Pipes.*

EN 13244-3:2002, *Plastics piping systems for buried and above-ground pressure systems for water for general purposes, drainage and sewerage — Polyethylene (PE) — Part 3: Fittings.*

EN 13244-4:2002, *Plastics piping systems for buried and above-ground pressure systems for water for general purposes, drainage and sewerage — Polyethylene (PE) — Part 4: Valves.*

EN 13244-5:2002, *Plastics piping systems for buried and above-ground pressure systems for water for general purposes, drainage and sewerage — Polyethylene (PE) — Part 5: Fitness for purpose of the system.*

EN ISO 6259-1:2001, *Thermoplastics pipes — Determination of tensile properties — Part 1: General test method (ISO 6259-1:1997).*

EN ISO 12162:1995, *Thermoplastics materials for pipes and fittings for pressure applications — Classification and designation — Overall service (design) coefficient (ISO 12162:1995).*

ISO 2859-1:1999, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection.*

ISO 3951:1989, *Sampling procedures and charts for inspection by variables for percent nonconforming.*

ISO 6259-3:1997, *Thermoplastics pipes — Determination of tensile properties — Part 3: Polyolefin pipes.*

ISO 13954:1997, *Plastics pipes and fittings — Peel decohesion test for polyethylene (PE) electrofusion assemblies of nominal outside diameter greater than or equal to 90 mm.*

ISO 13955:1997, *Plastics pipes and fittings — Crushing decohesion test for polyethylene (PE) electrofusion assemblies.*

ISO/DIS 13956:1996, *Plastics pipes and fittings — Determination of cohesive strength — Tear test for polyethylene (PE) assemblies.*

3 Terms, definitions, symbols and abbreviations

For the purposes of this Technical Specification the terms, definitions, symbols and abbreviations given in Part 1 and Part 3 to Part 5 of EN 13244, 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 organisation or company, approved by a certification body as possessing the necessary competence to verify and/or to carry out initial type testing, witness 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 management system

organisational structure, responsibilities, procedures, processes and resources for implementing quality management (see EN ISO 9000 [4])

3.1.5

quality management 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)

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

3.1.7

preliminary type testing (PTT)

type testing carried out by, or on behalf of, the manufacturer