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English version

**Plastics piping systems for water supply - Polyethylene (PE) -
Part 7: Guidance for the assessment of conformity**

Systèmes de canalisations en plastiques pour
l'alimentation en eau – Polyéthylène (PE) - Partie 7: Guide
pour l'évaluation de la conformité

Kunststoff-Rohrleitungssysteme für die Wasserversorgung
– Polyethylen (PE) – Teil 7 : Empfehlungen für die
Beurteilung der Konformität

This Technical Specification (CEN/TS) was approved by CEN on 9 February 2003 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 12201-7:2003 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 12201.

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 12201 consists of the following Parts, under the general title "*Plastics piping systems for water supply — 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 Part of EN 12201 includes the following:

- *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 under pressure include the following:

EN 1452, *Plastics piping systems for water supply — Unplasticized poly(vinyl chloride) (PVC-U)*

EN 1796, *Plastics piping systems for water supply with or without pressure — Glass-reinforced thermosetting plastics (GRP) based on unsaturated 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), intended to be used for water supply intended for human consumption including the conveyance of raw water prior to treatment.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this Technical Specification:

- 1) This Technical Specification provides no information as to whether the product may be used without restriction in any Member States of the EU or EFTA;
- 2) It should be noted that, while awaiting adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

This Part of EN 12201 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 12201 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 12201;
- 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.

In conjunction with one or more Parts of EN 12201 (see Foreword) it is applicable to polyethylene (PE) piping systems intended to be used for water supply intended for human consumption including the conveyance of raw water prior to treatment.

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 12201-1:2003, *Plastics piping systems for water supply — Polyethylene (PE) — Part 1: General*.

EN 12201-2:2003, *Plastics piping systems for water supply — Polyethylene (PE) — Part 2: Pipes*.

EN 12201-3:2003, *Plastics piping systems for water supply — Polyethylene (PE) — Part 3: Fittings*.

EN 12201-4:2001, *Plastics piping systems for water supply — Polyethylene (PE) — Part 4: Valves*.

EN 12201-5:2003, *Plastics piping systems for water supply — 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*.