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STN	**Potrubia diaľkového (teplovodného) vykurovania Priemyselne vyrábané ohybné rúrové systémy s nižším teplotným profilom Časť 2: Požiadavky a skúšobné metódy pre združené systémy s plastovými prípojkami**	**STN EN 17878-2** 38 3376

District heating pipes - Factory made flexible pipe systems with a lower temperature profile - Part 2: Requirements and test methods for bonded systems with plastic service pipes

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

District heating pipes - Factory made flexible pipe systems with a lower temperature profile - Part 2: Requirements and test methods for bonded systems with plastic service pipes

Tuyaux de chauffage urbain - Système de tuyaux flexibles préisolés - Partie 2 : Exigences et méthodes d'essai pour les systèmes bloqués avec tubes de service en plastique

Fernwärmerohre - Flexible Rohrsysteme mit einem niedrigeren Temperaturprofil - Teil 2: Verbundrohrsysteme mit Mediumrohren aus Kunststoff - Anforderungen und Prüfungen

This European Standard was approved by CEN on 28 December 2023.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 17878-2:2024) has been prepared by Technical Committee CEN/TC 107 “District heating and cooling systems”, the secretariat of which is held by DS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2024, and conflicting national standards shall be withdrawn at the latest by September 2024.

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

This document is part of the EN 17878 series of standards *District heating pipes — Factory made flexible pipe systems with a lower temperature profile*:

— *Part 1: Classification, general requirements and test methods*;

— *Part 2: Requirements and test methods for bonded systems with plastic service pipes*;

— *Part 3: Requirements and test methods for non bonded systems with plastic service pipe*s.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

District heating technology has developed rapidly since its origin and especially in recent times. Today, there are different generations of district heating networks. The technologies of these generations are driven by the different heat sources and operating temperatures used.

CEN/TC 107 provides a set of European standard series for rigid and flexible piping systems in district heating to suit all generations and requirements of district heating networks in the market.

The standard documents ensure quality for factory made piping systems in district heating.

This standard series covers flexible, factory made piping systems for operation conditions as described in the scope of part 1.

1 Scope

This document specifies requirements and test methods for flexible, factory made, buried district heating pipe systems with plastic service pipes and bonding between the layers of the pipe assemblies.

It is only applicable in conjunction with EN 17878-1.

This document is applicable to pipes, fittings, their joints and to joints with components made of non-plastics materials intended to be used for district heating installations.

This document is applicable to a maximum operating temperature of 80 °C and maximum operating design pressure up to 1,0 MPa for a design service life of at least 50 years.

This document does not apply to cover surveillance systems.

NOTE For higher temperatures or for the transport of other fluids, for example potable water, additional requirements and testing are needed. Such requirements are not specified in this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 485-2, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 2: Mechanical properties*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

EN 10025-2, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10025-3, *Hot rolled products of structural steels — Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*

EN 10025-4, *Hot rolled products of structural steels — Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels*

EN 10216-1, *Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 1: Non-alloy steel tubes with specified room temperature properties*

EN 10216-2, *Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties*

EN 10216-3, *Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 3: Alloy fine grain steel tubes*

EN 10217-1, *Welded steel tubes for pressure purposes — Technical delivery conditions — Part 1: Electric welded and submerged arc welded non-alloy steel tubes with specified room temperature properties*

EN 10217-2, *Welded steel tubes for pressure purposes — Technical delivery conditions — Part 2: Electric welded non-alloy and alloy steel tubes with specified elevated temperature properties*

EN 10217-3, *Welded steel tubes for pressure purposes — Technical delivery conditions — Part 3: Electric welded and submerged arc welded alloy fine grain steel tubes with specified room, elevated and low temperature properties*

EN 17248, *District heating and district cooling pipe systems — Terms and definitions*

EN 17878-1, *District heating pipes — Factory made flexible pipe systems with a lower temperature profile — Part 1: Classification, general requirements and test methods*

EN ISO 15875 (all parts), *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) (ISO 15875)*

EN ISO 15876 (all parts), *Plastics piping systems for hot and cold water installations — Polybutene (PB) (ISO 15876)*

EN ISO 21003 (all parts), *Multilayer piping systems for hot and cold water installations inside buildings (ISO 21003)*

EN ISO 22391 (all parts), *Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT) (ISO 22391)*

ISO 17455, *Plastics piping systems — Multilayer pipes — Determination of the oxygen permeability of the barrier pipe*