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BSI Standards Publication

Trenchless construction and testing of drains and sewers

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National foreword

This British Standard is the UK implementation of EN 12889:2022. It supersedes BS EN 12889:2000, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/505/10, Installation of buried pipes for gravity drain and sewer systems.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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October 2022

ICS 93.030; 23.040.05

Supersedes EN 12889:2000

English Version

Trenchless construction and testing of drains and sewers

Mise en oeuvre sans tranchée et essais des
branchements et collecteurs d'assainissement

Grabenlose Verlegung und Prüfung von
Abwasserleitungen und -kanälen

This European Standard was approved by CEN on 5 September 2022.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN 12889:2022) has been prepared by Technical Committee CEN/TC 165 “Waste water engineering”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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 supersedes EN 12889:2000.

In comparison with the previous edition, the following changes have been made:

- a) editorial and technical revision of the complete document;
- b) modification of terms and definitions;
- c) adaptation of the description of all methods of trenchless techniques and installation of pipelines;
- d) Clause 7 “Requirements of planning and construction” was added.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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1 Scope

This document is applicable to the trenchless construction, trenchless replacement techniques and testing of new drains and new sewers in the ground and usually operating as gravity or pressure pipelines, formed using prefabricated pipes and their joints.

Renovation techniques for existing pressure and non-pressure systems are not covered by this document.

Methods of trenchless construction include:

- manned and unmanned techniques;
- steerable and non-steerable techniques.

NOTE 1 Mining or tunnelling techniques for permanent structures (e.g. *in situ* construction or the use of prefabricated segments) are not covered by this document although some parts can apply to these methods.

NOTE 2 Trenchless insertion using a pipe plough system is a common method for installing small pipes and cables. The method does not exactly cope with the scope of this document. Therefore, it is described in the informative Annex D.

Requirements for associated pipeline installation work other than trenchless construction, e.g. for manholes and inspection chambers, are not covered by this document and are specified in EN 1610. This also applies to pipes that are subsequently installed within entry and exit shafts/pits.

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 476, *General requirements for components used in drains and sewers*

EN 752, *Drain and sewer systems outside buildings - Sewer system management*

EN 805, *Water supply - Requirements for systems and components outside buildings*

EN 1295-1, *Structural design of buried pipelines under various conditions of loading - Part 1: General requirements*

EN 1610, *Construction and testing of drains and sewers*

EN 1997-2, *Eurocode 7: Geotechnical design - Part 2: Ground investigation and testing*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

cutting head

tool or system of tools on a common support, which excavates at the face of a bore

Note 1 to entry: The term usually applies to mechanical methods of excavation.