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Geotechnical investigation and testing - Field testing - Part 5: Prebored pressuremeter test (ISO 22476-5:2023)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/23

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Geotechnical investigation and testing - Field testing - Part 5: Prebored pressuremeter test (ISO 22476-5:2023)

Reconnaissance et essais géotechniques - Essais en
place - Partie 5: Essai au pressiomètre en préforage
(ISO 22476-5:2023)

Geotechnische Erkundung und Untersuchung -
Felduntersuchungen - Teil 5: Vorgebohrter
Pressiometerversuch (ISO 22476-5:2023)

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EN ISO 22476-5:2023 (E)

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European foreword

This document (EN ISO 22476-5:2023) has been prepared by Technical Committee ISO/TC 182 "Geotechnics" in collaboration with Technical Committee CEN/TC 341 "Geotechnical Investigation and Testing" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by October 2023, and conflicting national standards shall be withdrawn at the latest by October 2023.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 ISO 22476-5:2012.

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Endorsement notice

The text of ISO 22476-5:2023 has been approved by CEN as EN ISO 22476-5:2023 without any modification.

**INTERNATIONAL
STANDARD**

**ISO
22476-5**

Second edition
2023-03

**Geotechnical investigation and
testing — Field testing —**

**Part 5:
Prebored pressuremeter test**

*Reconnaissance et essais géotechniques — Essais en place —
Partie 5: Essai au pressiomètre en préforage*



Reference number
ISO 22476-5:2023(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 182, *Geotechnics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 341, *Geotechnical Investigation and Testing*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 22476-5:2012), which has been technically revised.

The main changes are as follows:

- the title of the part has been modified;
- a reference loading programme with cyclic loading has been added;
- calibration procedures have been developed.

A list of all parts in the ISO 22476 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Geotechnical investigation and testing — Field testing —

Part 5: Prebored pressuremeter test

1 Scope

This document is applicable to pressuremeter tests using cylindrical flexible probes placed in pre-existent boreholes using testing procedures other than the Ménard procedure.

Pressuremeter tests following the Ménard procedure are provided in ISO 22476-4.

NOTE A high-pressure flexible pressuremeter probe which contains transducers for the measurement of radial displacements is also known as flexible dilatometer probe or high-pressure dilatometer probe.

This document applies to tests performed in any kind of grounds, starting from soils, treated or untreated fills, hard soils and soft rocks, up to hard and very hard rocks, either on land or offshore.

The parameters derived from this test can include stiffness, strength, initial in-situ stress state and consolidation properties.

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 16228-1, *Drilling and foundation equipment – safety – Part 1: Common requirements*

EN 16228-2, *Drilling and foundation equipment – safety – Part 2: Mobile drill rigs for civil and geotechnical engineering, quarrying and mining*

ISO 10012, *Measurement management systems — Requirements for measurement processes and measuring equipment*

ISO 14689, *Geotechnical investigation and testing — Identification, description and classification of rock*

ISO 22475-1, *Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 1: Technical principles for the sampling of soil, rock and groundwater*

ISO 22476-4, *Geotechnical investigation and testing — Field testing — Part 4: Prebored pressuremeter test by Ménard procedure*

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