SLOVENSKI STANDARD
kSIST FprEN ISO 22476-5:2012

01-september-2012

Geotehnično preiskovanje in preskušanje - Preskušanje na terenu - 5. del: Preskus s podajnim dilatometrom v vrtini (ISO/FDIS 22476-5:2012)

Geotechnical investigation and testing - Field testing - Part 5: Flexible dilatometer test (ISO/FDIS 22476-5:2012)

Geotechnische Erkundung und Untersuchung - Felduntersuchungen - Teil 5: Versuch mit dem flexiblen Dilatometer (ISO/FDIS 22476-5:2012)

Reconnaissance et essais géotechniques - Essais en place - Partie 5: Essai au dilatomètre flexible (ISO/FDIS 22476-5:2012)

Ta slovenski standard je istoveten z: **FprEN ISO 22476-5**

ICS:

93.020	Zemeljska dela. Izkopavanja. Gradnja temeljev. Dela pod zemljo	Earthworks. Excavations. Foundation construction. Underground works

kSIST FprEN ISO 22476-5:2012 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

FINAL DRAFT
FprEN ISO 22476-5

May 2012

ICS 93.020

English Version

Geotechnical investigation and testing - Field testing - Part 5: Flexible dilatometer test (ISO/FDIS 22476-5:2012)

Reconnaissance et essais géotechniques - Essais en place - Partie 5: Essai au dilatomètre flexible (ISO/FDIS 22476-5:2012)

Geotechnische Erkundung und Untersuchung - Felduntersuchungen - Teil 5: Versuch mit dem flexiblen Dilatometer (ISO/FDIS 22476-5:2012)

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 341.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. FprEN ISO 22476-5:2012: E

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Foreword

This document (FprEN ISO 22476-5:2012) has been prepared by Technical Committee CEN/TC 341 “Geotechnical Investigation and Testing", the secretariat of which is held by ELOT, in collaboration with Technical Committee ISO/TC 182 "Geotechnics".

This document is currently submitted to the Unique Acceptance Procedure.

FINAL
DRAFT

INTERNATIONAL
STANDARD

**ISO/FDIS
22476-5**

ISO/**182**/SC **1**

Secretariat: **DIN**

Voting begins on:
2012-05-24

Voting terminates on:
2012-07-24

Geotechnical investigation and testing — Field testing —

Part 5: Flexible dilatometer test

Reconnaissance et essais géotechniques — Essais en place —

Partie 5: Essai au dilatomètre flexible

Please see the administrative notes on page iii

Reference number
ISO/FDIS 22476-5:2012(E)

ISO/CEN PARALLEL PROCESSING

This final draft has been developed within the European Committee for Standardization (CEN), and processed under the **CEN-lead** mode of collaboration as defined in the Vienna Agreement. The final draft was established on the basis of comments received during a parallel enquiry on the draft.

This final draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel two-month approval vote in ISO and two month formal vote in CEN.

Positive votes shall not be accompanied by comments.

Negative votes shall be accompanied by the relevant technical reasons.

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 22476-5 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 341, *Geotechnical investigation and testing*, in collaboration with Technical Committee ISO/TC 182, *Geotechnics*, Subcommittee SC 1, *Geotechnical investigation and testing*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 22476 consists of the following parts, under the general title *Geotechnical investigation and testing — Field testing*:

— *Part 1: Electrical cone and piezocone penetration tests*

— *Part 2: Dynamic probing*

— *Part 3: Standard penetration test*

— *Part 4:Ménard pressuremeter test*

— *Part 5: Flexible dilatometer test*

— *Part 7: Borehole jack test*

— *Part 9: Field vane test*

— *Part 10: Weight sounding test* [Technical Specification]

— *Part 11: Flat dilatometer test* [Technical Specification]

— *Part 12: Mechanical cone penetration test (CPTM)*

Introduction

The results of dilatometer tests are used for deformation calculations provided that the range of stresses applied in the test are representative of the stresses to be applied by the proposed structure. Local experience normally improves the application of the results. In addition, for identification and classification of the ground, the results of sampling (according to ISO 22475-1) from each borehole are available for the evaluation of the tests. Identification and classification results (ISO 14688-1 and ISO 14689-1) are available from every separate ground layer within the desired investigation depth (see EN 1997-2:2007, 2.4.1.4(2)P, 4.1(1)P and 4.2.3(2)P).

Geotechnical investigation and testing — Field testing —

Part 5:
Flexible dilatometer test

1 Scope

This part of ISO 22476 is applicable to field testing using the flexible dilatometer test as part of geotechnical investigation and testing according to EN 1997-1 [1] and EN 1997-2 [2].

This part of ISO 22476 is applicable to tests in ground stiff enough not to be adversely affected by the drilling operation.

This part of ISO 22476 is applicable to four procedures for conducting a test with the flexible dilatometer.

This part of ISO 22476 applies to tests performed up to 1 800 m depth. Testing can be conducted either on land or off-shore.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including amendments) applies.

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

ISO 14688-1, *Geotechnical investigation and testing — Identification and classification of soil — Part 1: Identification and description*

ISO 14689-1, *Geotechnical investigation and testing — Identification and classification of rock — Part 1: Identification and description*

ISO 22475-1, *Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 1: Technical principles for execution*

EN 791, *Drill rigs — Safety*

EN 996, *Piling equipment — Safety requirements*

ENV 13005:1999, *Guide to the expression of uncertainty in measurement*

3 Terms, definitions and symbols

3.1 Terms and definitions

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

3.1.1
flexible dilatometer
cylindrical flexible probe which can be expanded by the application of hydraulic pressure or pressurized gas and which contains transducers for the measurement of the displacements of the flexible membrane and of the internal pressure