

DIN EN ISO 22476-5



ICS 93.020

Together with
DIN EN ISO 22476-4:2013-03 and
DIN EN ISO 22476-7:2013-03
supersedes
DIN 4094-5:2001-06

**Geotechnical investigation and testing –
Field testing –
Part 5: Flexible dilatometer test (ISO 22476-5:2012);
English version EN ISO 22476-5:2012,
English translation of DIN EN ISO 22476-5:2013-03**

Geotechnische Erkundung und Untersuchung –
Felduntersuchungen –
Teil 5: Versuch mit dem flexiblen Dilatometer (ISO 22476-5:2012);
Englische Fassung EN ISO 22476-5:2012,
Englische Übersetzung von DIN EN ISO 22476-5:2013-03

Reconnaissance et essais géotechniques –
Essais en place –
Partie 5: Essai au dilatomètre flexible (ISO 22476-5:2012);
Version anglaise EN ISO 22476-5:2012,
Traduction anglaise de DIN EN ISO 22476-5:2013-03

Document comprises 37 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

This document (EN ISO 22476-5:2012) has been prepared by Technical Committee CEN/TC 341 “Geotechnical investigation and testing” (Secretariat: ELOT, Greece) in collaboration with Technical Committee ISO/TC 182 “Geotechnics”.

The responsible German body involved in its preparation was the *Normenausschuss Bauwesen* (Building and Civil Engineering Standards Committee), Working Committee NA 005-05-09 AA *Baugrund, Feldversuche*.

Amendments

This standard differs from DIN 4094-5:2001-06 as follows:

- a) the content of DIN 4094-5 has been allocated to DIN EN ISO 22746-4, DIN EN ISO 22476-5 and DIN EN ISO 22476-7.

Previous editions

DIN 4094-5: 2001-06

ICS 93.020

English Version

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

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

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

This European Standard was approved by CEN on 25 November 2012.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

	Page
Foreword	3
Introduction.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms, definitions and symbols	5
3.1 Terms and definitions	5
3.2 Symbols and abbreviations	7
4 Equipment.....	9
4.1 General	9
4.2 Dilatometer probe.....	10
4.3 Pressure control and displacement measuring units	12
4.4 Connecting lines	12
4.5 Measurement and control accuracy.....	12
4.6 Data logging.....	13
5 Test procedure	13
5.1 Safety requirements.....	13
5.2 Assembly of parts	13
5.3 Calibration of the testing device and corrections of readings.....	13
5.4 Uncertainties of measurement.....	14
5.5 Preparation for the sounding.....	14
5.6 Pocket drilling and device placing	14
5.7 Test execution	15
5.8 End of loading	16
5.9 Back-filling of borehole	16
6 Test results	16
6.1 Basic equations.....	16
6.2 Loading test.....	17
6.3 Constant pressure tests (procedure D)	20
6.4 Uncorrected and corrected graphs	21
7 Test report.....	22
7.1 General	22
7.2 Reporting of test results.....	22
7.3 Choice of axis scaling.....	24
7.4 Presentation of test results.....	24
Annex A (normative) Calibration and corrections.....	25
Annex B (normative) Performing the test.....	28
Annex C (normative) Field report and GFDT results.....	32
Annex D (normative) Accuracy and uncertainties	34
Bibliography.....	35