



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 22476-14:2020

# Geotechnical investigation and testing - Field testing - Part 14: Borehole dynamic probing (ISO 22476-14:2020)

**I.S. EN ISO 22476-14:2020**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN ISO 22476-14:2020

*Published:*

2020-03-04

*This document was published under the authority of the NSAI and comes into effect on:*

2020-03-22

ICS number:

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

## National Foreword

I.S. EN ISO 22476-14:2020 is the adopted Irish version of the European Document EN ISO 22476-14:2020, Geotechnical investigation and testing - Field testing - Part 14: Borehole dynamic probing (ISO 22476-14:2020)

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

**Compliance with this document does not of itself confer immunity from legal obligations.**

*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

This page is intentionally left blank

**CEN/TC 341**

Date: 2020-03

**ISO 22476-14:2020**

CEN/TC 341

Secretariat: BSI

**Geotechnical investigation and testing - Field testing - Part 14: Borehole dynamic probing (ISO 22476-14:2020)**

**Geotechnische Erkundung und Untersuchung - Felduntersuchungen - Teil 14: Bohrlochrammsondierung (ISO 22476-14:2020)**

**Reconnaissance et essais géotechniques - Essais en place - Partie 14: Sondage dynamique au carottier (ISO 22476-14:2020)**

ICS: 93.020

Descriptors:

**EN ISO 22476-14:2020 (E)**

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>

## **European foreword**

This document (EN ISO 22476-14:2020) 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 September 2020, and conflicting national standards shall be withdrawn at the latest by September 2020.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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, Turkey and the United Kingdom.

## **Endorsement notice**

The text of ISO 22476-14:2020 has been approved by CEN as EN ISO 22476-14:2020 without any modification.

This page is intentionally left blank



**INTERNATIONAL  
STANDARD**

**ISO  
22476-14**

First edition  
2020-02

---

---

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

**Part 14:  
Borehole dynamic probing**

*Reconnaissance et essais géotechniques — Essais en place —  
Partie 14: Sondage dynamique au carottier*



Reference number  
ISO 22476-14:2020(E)

© ISO 2020

**ISO 22476-14:2020(E)**



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Fax: +41 22 749 09 47  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Equipment</b> .....	<b>2</b>
<b>5 Test procedure</b> .....	<b>6</b>
5.1 General.....	6
5.2 Test preparation.....	6
5.3 Equipment checks and calibration.....	7
5.4 Probing procedure.....	7
5.5 Field records.....	7
<b>6 Test evaluation and result mapping</b> .....	<b>8</b>
<b>7 Qualitative evaluation and derivation of geotechnical parameters</b> .....	<b>8</b>
7.1 General.....	8
7.2 Qualitative evaluation.....	9
7.3 Derived values.....	9
<b>Annex A (normative) Header sheet with measuring record for borehole dynamic probing</b> .....	<b>10</b>
<b>Annex B (informative) Examples of relations for considering the effect of ground water and relations between the results from probing with different probes as well as the derivation of geotechnical parameters</b> .....	<b>12</b>
<b>Bibliography</b> .....	<b>20</b>

## ISO 22476-14:2020(E)

### 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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 182, *Geotechnics*.

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](http://www.iso.org/members.html).

# Geotechnical investigation and testing — Field testing —

## Part 14: Borehole dynamic probing

### 1 Scope

This document specifies the equipment requirements, execution of and reporting on borehole dynamic probing.

**NOTE** This document fulfills the requirements for borehole dynamic probing as part of the geotechnical investigation and testing according to EN 1997-1 and EN 1997-2.

The document specifies technical requirements in respect to equipment and implementation, in order to extensively prevent incorrect appraisals of the subsoil conditions and to limit scatter in the probing results due to equipment and implementation.

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

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

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

### 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 <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1

##### **probing**

indirect subsoil exploration method in soils normally by driving a cone vertically while measuring the *penetration resistance* (3.4) to derive geotechnical parameters

#### 3.2

##### **borehole dynamic probing**

*probing* (3.1) in the borehole, which is carried out by driving by impact from the borehole base over a defined penetration depth

Note 1 to entry: Here the impact device is directly above the probe in the borehole.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-