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STN	**Geotechnický prieskum a skúšky. Skúšanie geotechnických konštrukcií. Časť 10: Skúšanie mikropilót: rýchle zaťažovacie skúšky (ISO 22477-10: 2016).**	**STN EN ISO 22477-10** 72 1035

Geotechnical investigation and testing - Testing of geotechnical structures - Part 10: Testing of piles: rapid load testing (ISO 22477-10:2016)

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. 03/17

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English Version

Geotechnical investigation and testing - Testing of geotechnical structures - Part 10: Testing of piles: rapid load testing (ISO 22477-10:2016)

Reconnaissance et essais géotechniques - Essais de structures géotechniques - Partie 10: Essai des pieux: essai de charge rapide (ISO 22477-10:2016)

Geotechnische Erkundung und Untersuchung - Prüfung von geotechnischen Bauwerken und Bauwerksteilen - Teil 10: Pfahlprüfungen: Schnellprüfung mit axialer Druckbelastung (ISO 22477-10:2016)

This European Standard was approved by CEN on 7 August 2016.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN ISO 22477-10:2016) has been prepared by Technical Committee CEN/TC 341 “Geotechnical Investigation and Testing”, the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 182 "Geotechnics".

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of an identical text or by endorsement, at the latest by April 2017, and conflicting national standards shall be withdrawn at the latest by April 2017.

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

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Endorsement notice

The text of ISO 22477-10:2016 has been approved by CEN as EN ISO 22477-10:2016 without any modification.

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INTERNATIONAL STANDARD

ISO 22477-10

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Geotechnical investigation and testing — Testing of geotechnical structures —

Part 10: Testing of piles: rapid load testing

Reconnaissance et essais géotechniques — Essais de structures géotechniques —

Partie 10: Essai des pieux: essai de charge rapide

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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 on 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 the following URL: www.iso.org/iso/foreword.html.

ISO 22477-10 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 182, *Geotechnics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 22477 series, published under the general title *Geotechnical investigation and testing — Testing of geotechnical structures*, can be found on the ISO website.

Introduction

This part of ISO 22477 outlines how a rapid load pile test is defined and specifies the equipment and testing procedures required. Informative, non-prescriptive guidance is included on the analysis of rapid load pile test results required to determine mobilised or ultimate compressive resistance of a pile.

INTERNATIONAL STANDARD ISO 22477-10:2016(E)

Geotechnical investigation and testing — Testing of geotechnical structures —

Part 10:
Testing of piles: rapid load testing

1 Scope

This part of ISO 22477 establishes the specifications for the execution of rapid load pile tests in which a single pile is subject to an axial load in compression to measure its load-displacement behaviour under rapid loading and to allow an assessment of its measured compressive resistance ($R_{c,m}$) and corresponding load-displacement behaviour.

This part of ISO 22477 is applicable to piles loaded axially in compression.

All pile types mentioned in EN 1536, EN 12699 and EN 14199 are covered by this part of ISO 22477.

The tests in this part of ISO 22477 are limited to rapid load pile tests only.

NOTE 1 This part of ISO 22477 can be used in conjunction with EN 1997–1. Numerical values of partial factors for limit states from pile load tests to be taken into account in design are provided in EN 1997–1. For design to EN 1997–1, the results from rapid load pile testing will be considered equivalent to the measured compressive resistance, $R_{c,m}$, after being subject to appropriate analysis.

NOTE 2 Guidance on analysis of the rapid load testing results to determine measured compressive resistance and corresponding load-displacement behaviour is given in Annex A.

This part of ISO 22477 provides specifications for the following:

a) investigation tests, whereby a sacrificial test pile is loaded up to ultimate limit state;

b) control tests, whereby the pile is loaded up to a specified load in excess of the serviceability limit state.

NOTE 3 Generally, an investigation test focuses on general knowledge of a pile type; a control test focuses on one specific application of a pile.

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.

There are no normative references in this document.