

SLOVENSKI STANDARD

SIST EN ISO 17892-5:2017

01-september-2017

Nadomešča:

SIST-TS CEN ISO/TS 17892-5:2004

SIST-TS CEN ISO/TS 17892-5:2004/AC:2010

Geotehnično preiskovanje in preskušanje - Laboratorijsko preskušanje zemljin - 5. del: Edometrski preskus s postopnim obremenjevanjem (ISO 17892-5:2017)

Geotechnical investigation and testing - Laboratory testing of soil - Part 5: Incremental loading oedometer test (ISO 17892-5:2017)

iTeh STANDARD PREVIEW

Geotechnische Erkundung und Untersuchung - Laborversuche an Bodenproben - Teil 5: Oedometerversuch mit stufenweiser Belastung (ISO 17892-5:2017)

[SIST EN ISO 17892-5:2017](https://standards.itih.ai/catalog/standards/sist/43efb05e-2f52-4609-9a41-6a59750b1319/sist-en-iso-17892-5:2017)

Reconnaissance et essais géotechniques - Essais de laboratoire sur les sols - Partie 5: Essai de chargement par palier à l'oedomètre sur sol saturé (ISO 17892-5:2017)

Ta slovenski standard je istoveten z: EN ISO 17892-5:2017

ICS:

13.080.20	Fizikalne lastnosti tal	Physical properties of soils
93.020	Zemeljska dela. Izkopavanja.	Earthworks. Excavations.
	Gradnja temeljev. Dela pod zemljo	Foundation construction. Underground works

SIST EN ISO 17892-5:2017

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 17892-5:2017](https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017)

<https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>

EUROPEAN STANDARD

EN ISO 17892-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

ICS 93.020; 13.080.20

Supersedes CEN ISO/TS 17892-5:2004

English Version

Geotechnical investigation and testing - Laboratory testing of soil - Part 5: Incremental loading oedometer test (ISO 17892-5:2017)

Reconnaissance et essais géotechniques - Essais de
laboratoire sur les sols - Partie 5: Essai de chargement
par palier à l'oedomètre (ISO 17892-5:2017)

Geotechnische Erkundung und Untersuchung -
Laborversuche an Bodenproben - Teil 5:
Oedometerversuch mit stufenweiser Belastung (ISO
17892-5:2017)

This European Standard was approved by CEN on 3 February 2017.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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

Contents	Page
European foreword.....	3

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 17892-5:2017](https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017)
<https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>

European foreword

This document (EN ISO 17892-5:2017) 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 September 2017, and conflicting national standards shall be withdrawn at the latest by September 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.

This document supersedes CEN ISO/TS 17892-5:2004.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

PREVIEW

(standards.iteh.ai)

Endorsement notice

The text of ISO 17892-5:2017 has been approved by CEN as EN ISO 17892-5:2017 without any modification.

SIST EN ISO 17892-5:2017
<https://standards.iteh.ai/catalog/standards/sist/45ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 17892-5:2017](https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017)

<https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>

INTERNATIONAL
STANDARD

ISO
17892-5

First edition
2017-02

**Geotechnical investigation and
testing — Laboratory testing of soil —
Part 5:
Incremental loading oedometer test**

*Reconnaissance et essais géotechniques — Essais de laboratoire sur
les sols —*

iTeh STANDARD PREVIEW
Partie 5: Essai de chargement par palier à l'oedomètre
(standards.iteh.ai)

[SIST EN ISO 17892-5:2017](https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017)

<https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>



Reference number
ISO 17892-5:2017(E)

© ISO 2017

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17892-5:2017](https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017)

<https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, 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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	2
5 Equipment	3
6 Test procedure	6
6.1 General.....	6
6.2 Specimen preparation.....	6
6.2.1 Selection of preparation method.....	6
6.2.2 Trimming from extruded or block sample.....	6
6.2.3 Extrusion from tube of diameter larger than the oedometer ring.....	7
6.2.4 Recompacted specimens.....	7
6.3 Measurement.....	7
6.4 Preparation of apparatus.....	7
6.4.1 Assembly of cell.....	7
6.4.2 Assembly in load frame.....	8
6.5 Loading.....	8
6.5.1 Loading sequence.....	8
6.5.2 Application of loads.....	9
6.6 Dismantling.....	9
7 Test results	10
7.1 General.....	10
7.2 Initial values.....	10
7.2.1 General.....	10
7.2.2 Initial water content.....	10
7.2.3 Initial bulk and dry density.....	10
7.3 Compressibility characteristics.....	10
7.3.1 General.....	10
7.3.2 Specimen height.....	10
7.3.3 Vertical strain.....	11
7.3.4 Void ratio.....	11
7.3.5 Compression-stress diagram.....	12
8 Test report	12
8.1 Mandatory reporting.....	12
8.2 Optional reporting.....	13
Annex A (normative) Calibration, maintenance and checks	14
Annex B (informative) Additional calculations	17
Bibliography	26

ISO 17892-5:2017(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).

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).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html. (standards.itech.ai)

ISO 17892-5 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 341, *Geotechnical investigation and testing*, in collaboration with ISO Technical Committee ISO/TC 182, *Geotechnics*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition cancels and replaces ISO/TS 17892-5:2004, which has been technically revised. It also incorporates the Technical Corrigendum ISO/TS 17892-5:2004/Cor 1:2006.

A list of all parts in the ISO 17892 series can be found on the ISO website.

Introduction

This document covers areas in the international field of geotechnical engineering never previously standardized internationally. It is intended that this document presents broad good practice throughout the world and significant differences with national documents is not anticipated. It is based on international practices (see Reference [1]).

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17892-5:2017](https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017)

<https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 17892-5:2017](https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017)

<https://standards.iteh.ai/catalog/standards/sist/43ebbc5e-2f52-4609-9a4d-6a59750b1319/sist-en-iso-17892-5-2017>