



NSAI
Standards

Irish Standard
I.S. EN ISO 17892-3:2015

Geotechnical investigation and testing -
Laboratory testing of soil - Part 3:
Determination of particle density (ISO/DIS
17892-3:2014)

I.S. EN ISO 17892-3:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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

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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.

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EN ISO 17892-3:2015

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Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN ISO 17892-3:2015 is the adopted Irish version of the European Document EN ISO 17892-3:2015, Geotechnical investigation and testing - Laboratory testing of soil - Part 3: Determination of particle density (ISO/DIS 17892-3:2014)

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

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.

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Correction Notice

Reference: EN ISO 17892-3:2015

Title: Geotechnical investigation and testing - Laboratory testing of soil - Part 3: Determination of particle density (ISO 17892-3:2015, Corrected version 2015-12-15)

Work Item: 00341075

Brussels, 2016-02-10

please include the following minor editorial correction(s) in the document related to:

the following language version(s) :

- English
- French
- German

for the following procedure :

- PQ/UQ
- Enquiry
- 2nd Enquiry
- Parallel Enquiry
- 2nd Parallel Enquiry
- Formal Vote
- 2nd Formal Vote
- Parallel Formal Vote
- 2nd Parallel Formal Vote
- UAP
- TC Approval
- 2nd TC Approval
- Publication
- Parallel Publication

It has been brought to our attention that this document, issued on 2015-12-16, requires modification.

ISO has published on 2015-12-15 a corrected version for ISO 17892-3:2015 (English).

Please find enclosed the updated English version.

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EUROPEAN STANDARD

EN ISO 17892-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2015

ICS 13.080.20; 93.020

Supersedes CEN ISO/TS 17892-3:2004

English Version

**Geotechnical investigation and testing - Laboratory testing
of soil - Part 3: Determination of particle density (ISO
17892-3:2015, Corrected version 2015-12-15)**

Reconnaissance et essais géotechniques - Essais de
laboratoire sur les sols - Partie 3: Détermination de la
masse volumique des grains (ISO 17892-3:2015)

Geotechnische Erkundung und Untersuchung -
Laborversuche an Bodenproben - Teil 3: Bestimmung
der Korndichte (ISO 17892-3:2015)

This European Standard was approved by CEN on 5 December 2015.

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

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

EN ISO 17892-3:2015 (E)

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European foreword

This document (EN ISO 17892-3:2015) 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 June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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 17892-3:2004.

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

Endorsement notice

The text of ISO 17892-3:2015, Corrected version 2015-12-15 has been approved by CEN as EN ISO 17892-3:2015 without any modification.

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**INTERNATIONAL
STANDARD**

**ISO
17892-3**

First edition
2015-12-15

Corrected version
2015-12-15

**Geotechnical investigation and
testing — Laboratory testing of soil —**

Part 3:

Determination of particle density

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

Partie 3: Détermination de la masse volumique des grains



Reference number
ISO 17892-3:2015(E)

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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).

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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

ISO 17892-3 was prepared by the European Committee for standardization (CEN) TC 341 *Geotechnical investigation and testing*, in collaboration with 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).

This International Standard cancels and replaces ISO/TS 17892-3:2004, which has been technically revised. It also incorporates the Technical Corrigendum ISO/TS 17892-3:2004/Cor.1:2006.

ISO 17892 consists of the following parts, under the general title *Geotechnical investigation and testing* — *Laboratory testing of soil*:

- *Part 1: Determination of water content*
- *Part 2: Determination of bulk density*
- *Part 3: Determination of particle density*
- *Part 4: Determination of particle size distribution*
- *Part 5: Incremental loading oedometer test*
- *Part 6: Fall cone test*
- *Part 7: Unconfined compression test*
- *Part 8: Unconsolidated undrained triaxial test*
- *Part 9: Consolidated triaxial compression tests*
- *Part 10: Direct shear tests*
- *Part 11: Permeability tests*
- *Part 12: Determination of liquid and plastic limits*

This corrected version of ISO 17892-3:2015 incorporates the following corrections plus other minor editorial modifications.

Foreword: It has been clarified that this is a first edition of an International Standard that is replacing a Technical Specification.

3.1: The word 'dry' has been added to the definition.

4.3.2: A temperature range has been specified.

Figure 2: Labels V_s and V_r have been removed.

5.2.4.3: An alternative method to determine the volume of the specimen has been added.

6.1.2: A temperature has been specified for ρ_L .

6.2.2: A note has been added.

Formula (7): Formula has been modified with a factor of 10^{-6} instead of 10^6 .

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