
**Geotechnical investigation and
testing — Identification and
classification of soil —**

**Part 1:
Identification and description**

*Reconnaissance et essais géotechniques — Identification et
classification des sols —*

Partie 1: Identification et description

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ISO 14688-1:2017

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

This second edition cancels and replaces the first edition (ISO 14688-1:2002), which has been technically revised. It also incorporates the Amendment ISO 14688-1:2002/Amd 1:2013.

A list of all parts in the ISO 14688 series can be found on the ISO website.

Introduction

This document gives details of the procedures to be followed in the identification and description of soils. [Clauses 4](#) and [5](#) provide the rules for soil identification which are used at all stages of ground investigation and geotechnical design. [Clauses 6](#) and [7](#) give details of the procedures to be followed by those actually describing soils in the field or laboratory. This comprises the description of the soil material in all aspects and the description of the soil mass characteristics in terms of the bedding and discontinuities.

The level of detail in a description will depend on the characteristics of the soil, the size and quality of the soil exposure or sample, and the needs of the particular project. The person carrying out the field identification and description should be suitably qualified, skilled and experienced to make a correct and appropriate description and experienced in the geological materials involved in the investigation.

Practice in soil identification and description varies from country to country, in part reflecting significant differences in geological conditions. In addition, the quality of samples available for description vary due to the investigation methods employed, as methods of investigation have been developed in response to the ground conditions present.

Following identification and description, ISO 14688-2 gives the means by which soils can be classified into groups of similar composition and geotechnical properties based on the results of field and laboratory tests with respect to their suitability for geotechnical engineering purposes. Test results provide a means of checking the accuracy of the field or laboratory descriptions.

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