

**ISO 18400-100:2017**



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**Soil quality — Sampling — Part 100: Guidance on the selection of sampling standards (ISO 18400-100:2017)**

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**Soil quality — Sampling —**

Part 100:

**Guidance on the selection of sampling  
standards**

*Qualité du sol — Échantillonnage —*

*Partie 100: Lignes directrices sur la sélection des normes  
d'échantillonnage*



# ISO 18400-100:2017(E)



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## ISO 18400-100:2017(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](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 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](http://www.iso.org/iso/foreword.html).

The document was prepared by Technical Committee ISO/TC 190, *Soil quality*, subcommittee SC 2, *Sampling*.

A list of all parts in the ISO 18400 series can be found on the ISO website.

# Soil quality — Sampling —

## Part 100: Guidance on the selection of sampling standards

### 1 Scope

This document describes the structure of sampling standards for any kind of soil investigation. It also describes the coherence of the different parts in the ISO 18400 series. It provides guidance on the selection of sampling standards appropriate for the objectives of users.

### 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.

ISO 11074, *Soil quality — Vocabulary*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 11074 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 4 General

Whenever soil is to be characterized, it is not possible nor convenient to examine the whole and it is therefore necessary to take samples. It is essential that clear sampling objectives are set to ensure that suitable results are obtained for the intended purposes, e.g. determination of the nutrient status of soil or assessment of (potential) risks to human health.

Given the wide variety of potential objectives for soil sampling such as characterization of soils (and other soil materials) that are composed of a mixture of mineral particles, organic matter, water, air (soil gas) and soil organisms belonging naturally or not to soil, there is a need for a range of complementary standards as described in this document.

### 5 Structure of sampling standards

Three levels of sampling standards are recognized in the ISO 18400 series (see [Figure 1](#)). This document is the umbrella standard which describes all sampling standards within the scope of the 'three levels-approach' and their interrelationships. It will be updated when new documents are introduced on the levels 1, 2 or 3. See also [Annex A](#).

- a) **Level 1** includes a limited number of general standards dealing with general concepts within the scope of (environmental) sampling, e.g. statistics, sampling techniques, terminology and safety issues.