INTERNATIONAL STANDARD

ISO 12857-1

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Optics and optical instruments — Geodetic instruments — Field procedures for determining accuracy —

Part 1:
Levels

Optique et instruments d'optique — Instruments géodésiques — Méthodes de détermination sur site de la précision —

Partie 1: Niveaux

Reference number
ISO 12857-1:1997(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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 12857-1 was prepared by Technical Committee ISO/TC 172, *Optics and optical instruments*, Subcommittee SC 6, *Geodetic and surveying instruments*

ISO 12857 consists of the following parts, under the general title *Optics and optical instruments — Geodetic instruments — Field procedures for determining accuracy* :

— *Part 1: Levels*

— *Part 2: Theodolites*

— *Part 3: Electro-optical distance meters (EDM instruments)*

Annex A of this part of ISO 12857 is for information only.

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Optics and optical instruments — Geodetic instruments — Field procedures for determining accuracy —

Part 1:
Levels

1 Scope

This part of ISO 12857 specifies field procedures to be adopted when determining and assessing the accuracy of levels used in surveying.

These tests are intended to be operational and not tests for acceptance or performance.

The procedures are applicable to the determination of the accuracy of different instruments at one time or of one instrument at different times.

The field procedures can be applied everywhere without the need of special ancillary equipment and are designed to minimize atmospheric influences.

NOTE — Other International Standards for testing measuring instruments for building construction are available.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 12857. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 12857 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 3534-1:1993, *Statistics — Vocabulary and symbols — Part 1: Probability and general statistical terms*

ISO 9849:1991, *Optics and optical instruments — Geodetic instruments — Vocabulary*

3 Definitions

For the purposes of this part of ISO 12857, the terms and definitions given in ISO 3534-1 and ISO 9849 apply.