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Foreword

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This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 6, *Geodetic and surveying instruments*.

This third edition cancels and replaces the second edition (ISO 9849:2000), which has been technically revised.

Introduction

This document forms one of a series concerning geodetic and surveying instruments. It gives definitions of terms which may be used in the drafting of other International Standards and national standards in this field.

Only terms relating to geodetic and surveying instruments for geodetic work and their essential parts are described in this document. It is intended for both the surveyor and the non-surveyor. Every reader is requested to use only these terms in the future so that, with time, a standard and acceptable terminology will come into common usage.

Optics and optical instruments — Geodetic and surveying instruments — Vocabulary

1 Scope

This document defines terms relating to geodetic field instruments only, e.g. distance meters, levels, theodolites and others, and their essential component parts which are normally used in terrestrial measuring operations of ordnance survey, topographic survey, plane survey and engineering survey. Therefore, terms concerning fields such as the following are not mentioned, for example, photogrammetry, astronomy, hydrographic survey and industrial metrology.

Accessories which are not necessary for the functioning of the instruments are not dealt with. The terms are arranged in English alphabetical order.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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

3.1 Types of geodetic instruments and related terms

3.1.1
alignment instrument
device used to aim at intermediate points and to a reference target at the end of an alignment

Note 1 to entry: The device is usually equipped with a powerful magnifying *telescope* (3.2.38).

3.1.1.1
alignment laser
line laser
pipe laser
alignment instrument (3.1.1) using a laser beam as reference line instead of an optical line of sight

3.1.2
barometer
instrument for measuring atmospheric pressure

Note 1 to entry: Barometers can be used for the atmospheric reduction of electronically measured distances or as *barometric altimeters* (3.1.2.2).

3.1.2.1
aneroid barometer
barometer (3.1.2) in which atmospheric pressure is balanced by some elastic elements as a method that does not involve liquid