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Standards

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I.S. EN ISO 13385-1:2011

Geometrical product specifications (GPS) - Dimensional measuring equipment - Part 1: Callipers; Design and metrological characteristics (ISO 13385-1:2011)

I.S. EN ISO 13385-1:2011

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English Version

**Geometrical product specifications (GPS) - Dimensional
measuring equipment - Part 1: Callipers; Design and
metrological characteristics (ISO 13385-1:2011)**

Spécification géométrique des produits (GPS) -
Équipement de mesure dimensionnel - Partie 1: Pieds à
coulisse; caractéristiques de conception et caractéristiques
métrologiques (ISO 13385-1:2011)

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Foreword

This document (EN ISO 13385-1:2011) has been prepared by Technical Committee ISO/TC 213 “Dimensional and geometrical product specifications and verification” in collaboration with Technical Committee CEN/TC 290 “Dimensional and geometrical product specifications and verification” the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by January 2012, and conflicting national standards shall be withdrawn at the latest by January 2012.

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**INTERNATIONAL
STANDARD**

**ISO
13385-1**

First edition
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**Geometrical product specifications
(GPS) — Dimensional measuring
equipment —**

**Part 1:
Callipers; Design and metrological
characteristics**

*Spécification géométrique des produits (GPS) — Équipement de
mesurage dimensionnel —*

*Partie 1: Pieds à coulisse; caractéristiques de conception et
caractéristiques métrologiques*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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ISO 13385-1 was prepared by Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*.

This first edition of ISO 13385-1, together with ISO 13385-2, cancels and replaces ISO 3599:1976 and ISO 6906:1984, which have been technically revised.

ISO 13385 consists of the following parts, under the general title *Geometrical product specifications (GPS) — Dimensional measuring equipment*:

- *Part 1: Callipers; Design and metrological characteristics*
- *Part 2: Calliper depth gauges; Design and metrological characteristics*

Introduction

This part of ISO 13385 is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO/TR 14638). It influences chain link 5 of the chains of standards on size and distance in the general GPS matrix.

The ISO/GPS Masterplan given in ISO/TR 14638 gives an overview of the ISO/GPS system of which this document is a part. The fundamental rules of ISO/GPS given in ISO 8015 apply to this document and the default decision rules given in ISO 14253-1 apply to specifications made in accordance with this document unless otherwise indicated.

For more detailed information on the relation of this part of ISO 13385 to other standards and the GPS matrix model, see Annex G.

I.S. EN ISO 13385-1:2011

Geometrical product specifications (GPS) — Dimensional measuring equipment —

Part 1: Callipers; Design and metrological characteristics

1 Scope

This part of ISO 13385 provides the most important design and metrological characteristics of callipers

- with analogue indication: vernier scale or circular scale (dial), and
- with digital indication: digital display.

2 Normative references

The following referenced documents are indispensable for the application 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 14253-1, *Geometrical Product Specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 1: Decision rules for proving conformance or non-conformance with specifications*

ISO 14253-2:2011, *Geometrical product specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 2: Guidance for the estimation of uncertainty in GPS measurement, in calibration of measuring equipment and in product verification*

ISO 14978:2006, *Geometrical product specifications (GPS) — General concepts and requirements for GPS measuring equipment*

IEC 60529, *Degrees of protection by enclosures (IP Code)*

ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

ISO/IEC Guide 99, *International vocabulary of metrology — Basic and general concepts and associated terms (VIM)*

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