INTERNATIONAL STANDARD

ISO 13385-2

First edition 2011-07-15

Geometrical product specifications (GPS) — Dimensional measuring equipment —

Part 2:

Calliper depth gauges; Design and metrological characteristics

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

Partie 2: Jauges de profondeur; caractéristiques de conception et caractéristiques métrologiques





© ISO 2011

tuced or utilized in any for ting from either ISO at All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Cont	tents	Page
	ord	
Introdu	uction	
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4 4.1 4.2 4.3 4.4	Design characteristics General design and nomenclature Dimensions Types of indicating devices Measuring faces	2 3 3
5 5.1 5.2 5.3 5.4	Metrological characteristics General Effect of slider locking Maximum permissible error of indication (limited by MPE) MPE and MPL for a number of metrological characteristics	6 6 6
6	Indication in product documentation and data sheets	7
7 7.1 7.2	Proof of conformance with specifications	
	General Measurement standards for the calibration of metrological characteristics	
8	Marking	
	A (informative) Error tests	
Annex	x B (informative) Advice on application	11
Annex	c C (informative) Data sheet (example)	12
	x D (informative) Calibration of metrological characteristics	
	x E (informative) Relation to the GPS matrix model	
	graphy	
		5

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.

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.

ISO 13385-2 was prepared by Technical Committee ISO/TC 213, Dimensional and geometrical product specifications and verification.

This first edition of ISO 13385-2, together with ISO 13385-1, 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.

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

This document is a previous general ded to the

Geometrical product specifications (GPS) — Dimensional measuring equipment —

Part 2:

Calliper depth gauges; Design and metrological characteristics

1 Scope

This part of ISO 13385 provides the most important design and metrological characteristics of calliper depth gauges:

- 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 cited editions apply. 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)

© ISO 2011 – All rights reserved