



SLOVENSKI STANDARD
SIST EN ISO 10360-2:2002
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Geometrical Product Specifications (GPS) - Acceptance and reverification tests for coordinate measuring machines (CMM) - Part 2: CMMs used for measuring size (ISO 10360-2:2001)

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Geometrische Produktspezifikation (GPS) - Annahmeprüfung und Bestätigungsprüfung für Koordinatenmessgeräte (KMG) - Teil 2: KMG angewendet für Längenmessungen (ISO 10360:2001)

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Spécification géométrique des produits (GPS) - Essais de réception et de vérification périodique des machines a mesurer tridimensionnelles (MMT) - Partie 2: MMT utilisées pour les mesures de tailles (ISO 10360-2:2001)

Ta slovenski standard je istoveten z: EN ISO 10360-2:2001

ICS:

17.040.30 Merila Measuring instruments

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 10360-2

December 2001

ICS 17.040.30

Supersedes EN ISO 10360-2:1995

English version

**Geometrical Product Specifications (GPS) - Acceptance and
reverification tests for coordinate measuring machines (CMM) -
Part 2: CMMs used for measuring size (ISO 10360-2:2001)**

Spécification géométrique des produits (GPS) - Essais de
réception et de vérification périodique des machines à
mesurer tridimensionnelles (MMT) - Partie 2: MMT utilisées
pour les mesures de tailles (ISO 10360-2:2001)

Geometrische Produktspezifikation (GPS) -
Annahmeprüfung und Bestätigungsprüfung für
Koordinatenmessgeräte (KMG) - Teil 2: KMG angewendet
für Längenmessungen (ISO 10360:2001)

This European Standard was approved by CEN on 12 November 2001.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 10360-2:2001 (E)

CORRECTED 2002-02-06

Foreword

This document (ISO 10360-2:2001) 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 specification and verification", the secretariat of which is held by AFNOR.

This document supersedes EN ISO 10360-2:1995.

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 June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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SIST EN ISO 10360-2:2002
Endorsement notice

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The text of the International Standard ISO 10360-2:2001 has been approved by CEN as a European Standard without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

Annex ZA (normative)

Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 3650	1998	Geometrical product specifications (GPS) - Length standards - Gauge blocks	EN ISO 3650	1998
ISO 10360-1	2000	Geometrical Product Specifications (GPS) - Acceptance and reverification tests for coordinate measuring machines (CMM) - Part 1: Vocabulary	EN ISO 10360-1	2000
ISO 14253-1	1998	Geometrical Product Specifications (GPS) - Inspection by measurement of workpieces and measuring equipment - Part 1: Decision rules for proving conformance or non-conformance with specifications	EN ISO 14253-1	1998
ISO 14660-1	1999	Geometrical Product Specifications (GPS) - Geometrical features - Part 1: General terms and definitions	EN ISO 14660-1	1999

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INTERNATIONAL STANDARD

**ISO
10360-2**

Second edition
2001-12-15

Geometrical Product Specifications (GPS) — Acceptance and reverification tests for coordinate measuring machines (CMM) —

Part 2: CMMs used for measuring size

*Spécification géométrique des produits (GPS) — Essais de réception et de
vérification périodique des machines à mesurer tridimensionnelles
(MMT) —*

SIST EN ISO 10360-2:2002

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Partie 2 : MMT utilisées pour les mesures de tailles



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ISO 10360-2:2001(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 part of ISO 10360 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 10360-2 was prepared by Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*.

This second edition cancels and replaces the first edition (ISO 10360-2:1994), which has been technically revised and whose title has changed.

ISO 10360 consists of the following parts, under the general title *Geometrical Product Specifications (GPS) — Acceptance and reverification tests for coordinate measuring machines (CMM)*:

- *Part 1: Vocabulary* <https://standards.iteh.ai/catalog/standards/sist/5e6f4a31-f1f2-4c25-bec0-743cb1c844f1/sist-en-iso-10360-2-2002>
- *Part 2: CMMs used for measuring size*
- *Part 3: CMMs with the axis of a rotary table as the fourth axis*
- *Part 4: CMMs used in scanning measuring mode*
- *Part 5: CMMs using multiple-stylus probing systems*
- *Part 6: Estimation of errors in computing Gaussian associated features*

Annexes A and B of this part of ISO 10360 are for information only.

Introduction

This part of ISO 10360 is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO/TR 14638). It influences link 5 of the chains of standards on size, distance, radius, angle, form, orientation, location, run-out and datums.

For more detailed information of the relation of this part of ISO 10360 to other standards and the GPS matrix model see annex B.

The tests of this part of ISO 10360 have two different technical objectives, which are to test

- the error of indication for size measurement, and
- the probing error,

of which the more important is the test for the error of indication for size measurement. The benefit of this test is that the measured result has a direct traceability to the unit length, the metre, and that it gives knowledge on how the CMM will perform when similar measurement relative to the unit length is performed.

The other test is intended to assess the 3D-probing error as a supplement to the test for the error of indication for size measurement, which only involves the probing system in two dimensions. Because it is not possible to completely isolate the probing errors from other sources of machine error, some measurement errors, of both static and dynamic origin, inherent in the other parts of the CMM measuring system, will affect the results of measurement in this test.

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