



SLOVENSKI STANDARD
oSIST prEN ISO 14659:2007
01-julij-2007

GdYWZ_UMU[Yca Yff]g_l 'j Y]]b]nXY_U!'Cgbcj Y!'?cbWdhžbU YU]b'dfUj]U
fIGC#B -G%(*) - .&\$+L

Geometrical product specifications (GPS) - Fundamentals - Concepts, principles and rules (ISO/DIS 14659:2007)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Spécification géométrique des produits (GPS) - Principes fondamentaux - Concepts, principes et règles (ISO/DIS 14659:2007)

<https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-22b16bf1/sist-pr-en-iso-14659-2007>

Ta slovenski standard je istoveten z: **prEN ISO 14659**

ICS:

17.040.01	Linearne in kotne meritve na splošno	Linear and angular measurements in general
-----------	--------------------------------------	--

oSIST prEN ISO 14659:2007

en

May 2007

ICS 17.040.30

English Version

Geometrical product specifications (GPS) - Fundamentals - Concepts, principles and rules (ISO/DIS 14659:2007)

Spécification géométrique des produits (GPS) - Principes
fondamentaux - Concepts, principes et règles (ISO/DIS
14659:2007)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 290.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

Foreword

This document (prEN ISO 14659:2007) 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 is currently submitted to the parallel Enquiry.

Endorsement notice

The text of ISO/DIS 14659:2007 has been approved by CEN as prEN ISO 14659:2007 without any modifications.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 8015:2012

<https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-ec4c22b46bfl/sist-en-iso-8015-2012>



DRAFT INTERNATIONAL STANDARD ISO/DIS 14659

ISO/TC 213

Secretariat: DS

Voting begins on:
2007-05-10

Voting terminates on:
2007-10-10

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Geometrical product specifications (GPS) — Fundamentals — Concepts, principles and rules

Spécification géométrique des produits (GPS) — Principes fondamentaux — Concepts, principes et règles

ICS 17.040.01

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO/CEN PARALLEL ENQUIRY

The CEN Secretary-General has advised the ISO Secretary-General that this ISO/DIS covers a subject of interest to European standardization. **In accordance with the ISO-lead mode of collaboration as defined in the Vienna Agreement, consultation on this ISO/DIS has the same effect for CEN members as would a CEN enquiry on a draft European Standard.** Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month FDIS vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 8015:2012](https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-ec4c22b46bfl/sist-en-iso-8015-2012)

<https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-ec4c22b46bfl/sist-en-iso-8015-2012>

Copyright notice

This ISO document is a Draft International Standard and is copyright-protected by ISO. Except as permitted under the applicable laws of the user's country, neither this ISO draft nor any extract from it may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission being secured.

Requests for permission to reproduce should be addressed to either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
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

Reproduction may be subject to royalty payments or a licensing agreement.

Violators may be prosecuted.

Contents

Page

1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	General terms	1
3.2	Generic terms related to drawings and indications and specification on drawings.....	5
4	Fundamental Assumptions	7
4.1	General	7
4.2	Determination of functional limits	7
4.3	Determination of tolerance limits	7
4.4	Shape of loss function	7
5	Fundamental principles	7
5.1	The invocation principle	7
5.2	The hierarchy principle	7
5.3	The definitive drawing principle	8
5.4	The feature principle	8
5.5	The independency principle	8
5.6	The decimal principle	8
5.7	The default principle	8
5.8	The reference condition principle.....	9
5.9	The duality principle.....	9
5.10	The functional control principle.....	9
5.11	The general specification principle	10
5.12	The uncertainty principle.....	10
6	Rules for interpretation of GPS specifications given in TPD.....	10
6.1	Determination of interpretation date	10
6.2	Drawing indications	12
6.3	Referenced standards.....	13
6.4	National or regional standards	13
7	Rules for indication of default specification operators.....	13
7.1	General	13
7.2	ISO general default specifications.....	13
7.3	Company default specifications	14
7.4	Drawing specific default specification	15
8	Rules for indication of special specification operators	16
8.1	General	16
8.2	Added complementary information (requirements) to the ISO basic specification	16
9	Rules for parenthetic statements	16
Annex A (Normative) Relation to the GPS matrix model.....		17
Bibliography.....		18

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 14659 was prepared by Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*.

iteh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 8015:2012](https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-ec4c22b46bfl/sist-en-iso-8015-2012)

<https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-ec4c22b46bfl/sist-en-iso-8015-2012>

Introduction

This International Standard is a geometrical product specification (GPS) standard and is to be regarded as a fundamental GPS standard (see ISO/TR 14638). It influences all other standards in the GPS matrix system, i.e., all global, general and supplementary standards, as well as any other kind of document in the GPS matrix system.

For more detailed information of the relation of this International Standard to other standards and the GPS matrix model see Annex A.

This International Standard covers a number of fundamental principles that apply to all GPS standards and technical product documentation that is based on the GPS matrix system. Until this standard was published, these principles were implied, but not formulated explicitly.

This International Standard also covers the indication of ISO default specification operators and particularly the indication of non-default specification operators, either by direct indication or by the use of company specific or drawing specific defaults.

For the purpose of this International Standard, a concept is considered as an abstract idea, a principle is considered as a standardized truth based on concepts upon which rules are based, and a rule is considered as a standardized procedure (for action).

(standards.iteh.ai)

[SIST EN ISO 8015:2012](https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-ec4c22b46bfl/sist-en-iso-8015-2012)

<https://standards.iteh.ai/catalog/standards/sist/67069b4a-cd65-4051-9e70-ec4c22b46bfl/sist-en-iso-8015-2012>

Geometrical product specifications (GPS) — Fundamentals — Concepts, principles and rules

1 Scope

This International Standard specifies fundamental concepts, principles and rules valid for the creation, interpretation and application of all other International Standards, Technical Specifications and Technical Reports concerning dimensional and Geometrical Product Specifications (GPS) and Verification.

This International standard applies to the interpretation of all Technical Product Documentation where GPS symbology is used.

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 7200:2004, *Technical drawings — Title blocks*.

ISO/TS 17450-1:2005, *Geometrical Product Specifications (GPS) — General concepts — Part 1: Model for geometric specification and verification*.

ISO/TS 17450-2:2002, *Geometrical Product Specifications (GPS) — General concepts — Part 2: Basic tenets, specifications, operators and uncertainties*.

Guide to the Expression of Uncertainty in Measurement (GUM). BIPM, IEC, IFCC, ISO, IUPAC, IUPAP, OIML, 1st edition, 1995

International Vocabulary of Basic and General Terms in Metrology (VIM). BIPM, IEC, IFCC, ISO, IUPAC, IUPAP, OIML, 2nd edition, 1993

3 Terms and definitions

For the purposes of this document, the definitions of ISO/TS 17450-1, ISO/TS 17450-2, VIM, GUM and the following apply.

3.1 General terms

3.1.1

specification

expression of permissible limits on a characteristic

[ISO/TS 17450-1, definition 3.28]