

### SLOVENSKI STANDARD SIST EN ISO 14638:2015

01-maj-2015

Nadomešča:

SIST CR ISO 14638:2004 SIST ISO/TR 14638:1999

### Specifikacija geometrijskih veličin izdelka (GPS) - Glavni načrt (ISO 14638:2015)

Geometrical product specification (GPS) - Masterplan (ISO 14638:2015)

Geometrische Produktspezifikation (GPS) - Übersicht (ISO 14638:2015)

Spécification géométrique des produits (GPS) Schéma directeur (ISO 14638:2015)

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Specifikacija geometrijskih veličin izdelka (GPS)

Geometrical Product Specification (GPS)

**SIST EN ISO 14638:2015** 

en

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# iTeh STANDARD PREVIEW (standards.iteh.ai)

EUROPEAN STANDARD NORME EUROPÉENNE **EN ISO 14638** 

**EUROPÄISCHE NORM** 

January 2015

ICS 17.040.01

Supersedes CR ISO 14638:1996

#### **English Version**

## Geometrical product specifications (GPS) - Matrix model (ISO 14638:2015)

Spécification géométrique des produits (GPS) - Modèle de matrice (ISO 14638:2015)

Geometrische Produktspezifikation (ISO GPS) - Matrix-Modell (ISO 14638:2015)

This European Standard was approved by CEN on 25 October 2014.

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#### SIST EN ISO 14638:2015

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

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## iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 14638:2015 (E)

### **Foreword**

This document (EN ISO 14638:2015) 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 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of an identical text or by endorsement, at the latest by July 2015, and conflicting national standards shall be withdrawn at the latest by July 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes CR ISO 14638:1996.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## iTeh STANEndorsement poticeVIEW

The text of ISO 14638:2015 has been approved by CEN as EN ISO 14638:2015 without any modification.

**SIST EN ISO 14638:2015** 

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## INTERNATIONAL STANDARD

ISO 14638

First edition 2015-01-15

## Geometrical product specifications (GPS) — Matrix model

Spécification géométrique des produits (GPS) — Modèle de matrice

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### ISO 14638:2015(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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 213, Dimensional and geometrical product specifications and verification.

SISTEN ISO 14638:2015

This first edition of ISO 14638 cancels and replaces ISO/TR 14638:1995.51-49ba-b6cb-

c473cb6338c2/sist-en-iso-14638-2015

ISO 14638 has been revised from the earlier ISO/TR 14638 document with the aim of clarifying the text and the definitions, in order to improve the usability of the document, and to revise the matrix where developments in ISO GPS have made this necessary.

The main changes are as follows:

- The category of Global GPS standards has been removed, as it was not clearly distinguished from either fundamental or general GPS standards. Standards which were formerly classified as global GPS standards have either been withdrawn, or can be categorized as fundamental or general GPS standards.
- The headings formerly used to describe the different chains in the matrix have been reduced.
  - The headings for 'form of a line (independent of a datum)' and 'form of a surface (independent of a datum)' have been replaced with a single heading of 'form'.
  - The headings for 'form of a line dependent on a datum' and 'form of a surface dependent on a datum' have been removed, because these are covered under orientation and location.
  - The heading for 'datums' has been removed from the matrix, because datums are not geometrical properties. <u>Clause 4</u> now explains how the ISO GPS standard for datums is covered in the ISO GPS matrix model.
  - The headings for 'circular run-out' and 'total run-out' have been amalgamated into a single heading of 'run-out'.
  - The three chains for 'roughness profile', 'waviness profile' and 'primary profile' have been replaced with a single entry for 'profile surface texture'.

- The heading for 'angle' has been removed, as angles are covered under the headings of 'size' and 'distance'.
- The heading for 'radius' has been removed, as this is covered under the headings of 'distance' and 'form'.
- The heading for 'edges' has been removed, as edges are not a geometrical property.
- An additional category of general GPS standards for areal surface texture has been added.
- An additional chain link for conformance and non-conformance has been added.
- The chain links have been given descriptive titles and are lettered. The chain link numbers used previously have been removed.
- The GPS matrix now appears in only a single format for fundamental and general GPS standards.
- The lists of GPS standards has been removed from this document. An up-to-date list of ISO/TC 213 standards is maintained at the following location on the ISO website: <a href="http://www.iso.org/iso/home/store/catalogue\_tc/catalogue\_tc\_browse.htm?commid=54924&published=on">http://www.iso.org/iso/home/store/catalogue\_tc\_browse.htm?commid=54924&published=on</a>
- A diagram showing a version of the matrix populated with references to individual ISO standards has been removed from this document. An online version of the matrix, with facilities to interrogate it, now appears on the ISO/TC 213 website at <a href="http://isotc213.ds.dk/">http://isotc213.ds.dk/</a>, where it can be kept up-to-date.
- The rules which were formerly listed for the preparation of ISO GPS standards have been redrafted as a bulleted list of principles and recommendations.
  - The 'rule of unambiguity' has been re-written as the first principle in the list.
  - The 'rule of totality' has been removed, as it was not a rule but an aspiration.
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  - The 'rule of complementarity' has been removed because its meaning was not clear.
  - The second principle has been added to avoid conflict between different GPS standards, which was the intention behind the former 'rule of complementarity'.
- A third recommendation has been added, specifying the format of an informative annex which will appear in all future GPS standards produced by ISO/TC 213. The annex explains how the individual GPS standard fits into the GPS matrix.