

# **SLOVENSKI STANDARD**

## **SIST EN ISO 14405-2:2012**

**01-marec-2012**

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### **Specifikacija geometrijskih veličin izdelka (GPS) - Prikazovanje dimenzij in toleranc - 2. del: Dimenzije, ki niso linearne (ISO 14405-2:2011)**

Geometrical product specifications (GPS) - Dimensional tolerancing - Part 2: Dimensions other than linear sizes (ISO 14405-2:2011)

Geometrische Produktspezifikation (GPS) - Geometrische Tolerierung - Teil 2: Andere als lineare Maße (ISO 14405-2:2011)

Spécification géométrique des produits (GPS) - Tolérancement dimensionnel - Partie 2: Dimensions autres que les tailles linéaires (ISO 14405-2:2011)

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**Ta slovenski standard je istoveten z: EN ISO 14405-2:2011**

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#### **ICS:**

17.040.10	Tolerance in ujemi	Limits and fits
17.040.40	Specifikacija geometrijskih veličin izdelka (GPS)	Geometrical Product Specification (GPS)

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 14405-2**

December 2011

ICS 17.040.10

English Version

**Geometrical product specifications (GPS) - Dimensional  
tolerancing - Part 2: Dimensions other than linear sizes (ISO  
14405-2:2011)**

Spécification géométrique des produits (GPS) -  
Tolérancement dimensionnel - Partie 2: Dimensions autres  
que les tailles linéaires (ISO 14405-2:2011)

Geometrische Produktspezifikation (GPS) - Geometrische  
Tolerierung - Teil 2: Andere als lineare Maße (ISO 14405-  
2:2011)

This European Standard was approved by CEN on 15 October 2011.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, 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.



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## Foreword

This document (EN ISO 14405-2:2011) 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 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 June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

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.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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# INTERNATIONAL STANDARD

**ISO**  
**14405-2**

First edition  
2011-12-01

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## Geometrical product specifications (GPS) — Dimensional tolerancing —

### Part 2: Dimensions other than linear sizes

*Spécification géométrique des produits (GPS) — Tolérancement  
dimensionnel —*

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*Partie 2: Dimensions autres que tailles linéaires*

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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.

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 14405-2 was prepared by Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*.

This first edition of ISO 14405-2 cancels and replaces ISO 406:1987.

ISO 14405 consists of the following parts, under the general title *Geometrical product specifications (GPS) — Dimensional tolerancing*:

- *Part 1: Linear sizes*
- *Part 2: Dimensions other than linear sizes*

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## Introduction

This part of ISO 14405 is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO/TR 14638). In the general GPS matrix, it influences chain link 1 in the distance and radius chains of standards and chain links 1, 2 and 3 in the angle chain of standards.

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 dimensions other than linear sizes, the requirement is ambiguous when applied to the real workpiece. It is the presence of form and angular deviations on all real workpieces that makes these requirements ambiguous, i.e. there is a specification ambiguity.

It has to be realized that this specification ambiguity can only be avoided for features of size toleranced in accordance with ISO 14405-1. For all other dimensions, geometrical tolerancing should be used in order to control the specification ambiguity.

For more detailed information on the relation of this part of ISO 14405 to other standards and to the GPS matrix model, see Annex B.

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