SLOVENSKI STANDARD
SIST EN ISO 14405-2:2012/oprA1:2017

01-september-2017

Specifikacija geometrijskih veličin izdelka (GPS) - Prikazovanje dimenzij in toleranc - 2. del: Dimenzije, ki niso linearne - Dopolnilo 1 (ISO 14405-2:2011/DAM 1:2017)

Geometrical product specifications (GPS) - Dimensional tolerancing - Part 2: Dimensions other than linear sizes - Amendment 1 (ISO 14405-2:2011/DAM 1:2017)

Geometrische Produktspezifikation (GPS) - Dimensionelle Tolerierung - Teil 2: Andere als lineare Maße - Änderung 1 (ISO 14405-2:2011/DAM 1:2017)

Spécification géométrique des produits (GPS) - Tolérancement dimensionnel - Partie 2: Dimensions autres que tailles linéaires - Amendement 1 (ISO 14405-2:2011/DAM 1:2017)1:2017)

Ta slovenski standard je istoveten z: **EN ISO 14405-2:2011/prA1**

ICS:

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

SIST EN ISO 14405-2:2012/oprA1:2017 **en,fr,de**

DRAFT AMENDMENT

ISO 14405-2:2011/DAM 1

ISO/TC **213**

Secretariat: **BSI**

Voting begins on:
2017-06-07

Voting terminates on:
2017-08-29

Geometrical product specifications (GPS) — Dimensional tolerancing —

Part 2:
Dimensions other than linear sizes

AMENDMENT 1

Spécification géométrique des produits (GPS) — Tolérancement dimensionnel —

Partie 2: Dimensions autres que tailles linéaires

AMENDEMENT 1

ICS: 17.040.10

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

Reference number
ISO 14405-2:2011/DAM 1:2017(E)

COPYRIGHT PROTECTED DOCUMENT

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Geometrical product specifications (GPS) — Dimensional tolerancing —

Part 2:
Dimensions other than linear sizes

AMENDMENT 1

Title:

Replace the text with the following:

Geometrical product specifications (GPS) — Dimensional tolerancing — Part 2: Dimensions other than linear or angular sizes

Introduction

Replace the first two paragraphs:

This document is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO 14638). It influences chain link A of the chain of standards on distance.

The ISO GPS Matrix model given in ISO 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.

1 Scope

1st paragraph

Replace the text with the following:

This document illustrates the use of geometrical tolerancing for dimensions that are not linear or angular sizes to avoid the ambiguity caused by the use of ± tolerances on these dimensions. Both linear and angular dimensions, except the size of features of size.

NOTE 2

Replace the text with the following:

For indications of size tolerances, see the following:

— ISO 14405-1 for linear size;

— ISO 14405-3 for angular size;

— ISO 2538-1 and ISO 2538-2 for wedges;

— ISO 3040 for cones.

2 Normative references

Update the years

From:

ISO 129-1:—), Technical drawings — Indication of dimensions and tolerances — Part 1: General principles

To:

ISO 129-1, Technical drawings — Indication of dimensions and tolerances — Part 1: General principles

From:

ISO 1101:—, 2), Geometrical Product Specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out

To:

ISO 1101, Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out

From:

ISO 8015:2011, Geometrical product specifications (GPS) — Fundamentals — Concepts, principles and rules

To:

ISO 8015, Geometrical product specifications (GPS) — Fundamentals — Concepts, principles and rules

From:

ISO 13715:2000, Technical drawings — Edges of undefined shape — Vocabulary and indications

To:

ISO 13715, Technical product documentation — Edges of undefined shape — Indication and dimensioning

From:

ISO 14405-1:2010, Geometrical product specifications (GPS) — Dimensional tolerancing — Linear sizes

To:

ISO 14405-1, Geometrical product specifications (GPS) — Dimensional tolerancing — Part 1: Linear sizes

From:

ISO 17450-1:—3), Geometrical product specifications (GPS) — General concepts — Part 1: Model for geometrical specification and verification

To:

ISO 17450-1, Geometrical product specifications (GPS) — General concepts — Part 1: Model for geometrical specification and verification

From:

ISO 17450-2:—4), Geometrical product specifications (GPS) — General concepts — Part 2: Basic tenets, specifications, operators, uncertainties and ambiguities

To:

ISO 17450-2, Geometrical product specifications (GPS) — General concepts — Part 2: Basic tenets, specifications, operators, uncertainties and ambiguities

Add:

ISO 17450-3, Geometrical product specifications (GPS) — General concepts — Part 3: Toleranced features

Remove:

ISO 286-1:2010, Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 1: Basis of tolerances, deviations and fits

ISO 14660-1:1999, Geometrical Product Specifications (GPS) — Geometrical features — Part 1: General terms and definitions

ISO 14660-2:1999, Geometrical Product Specifications (GPS) — Geometrical features — Part 2: Extracted median line of a cylinder and a cone, extracted median surface, local size of an extracted feature

2) To be published. (Revision of ISO 1101:2004)

3) To be published. (Revision of ISO/TS 17450-1:2005)

4) To be published. (Revision of ISO/TS 17450-2:2002)

Replace:

ISO 2538:1998, Geometrical Product Specifications (GPS) — Series of angles and slopes on prisms

with

ISO 2538-1, Geometrical product specifications (GPS) — Wedges — Part 1: Series of angles and slopes

and

ISO 2538-2, Geometrical product specifications (GPS) — Wedges — Part 2: Dimensioning and tolerancing

3 Terms and definitions

1st paragraph.

Add:

ISO 17450-3

Remove:

ISO 14660-1 and ISO 14660-2

4 Principles and rules for indication of dimensions and related tolerances

3rd paragraph

Replace the text with the following:

For dimensions other than linear or angular sizes, a requirement with ± tolerancing is ambiguous (specification ambiguity) when applied to a real workpiece. This type of specification is not recommended; see Annex A

4th paragraph

Replace the text with the following:

Specification ambiguity can only be avoided for linear sizes toleranced in accordance with ISO 14405-1 and angular sizes toleranced in accordance with ISO 14405-3. In order to minimize specification ambiguity, geometrical tolerancing shall be used

Table 1:

Change row 11, column 5 from:

Angular size, cones

To:

Angular size, cones and wedges

Change row 11, column 6 from:

ISO 3040,

To:

ISO 3040, ISO 14405-3

6 Indication of tolerances for linear and angular dimensions

2nd paragraph:

Replace the text with the following:

Indication of tolerances for angular dimensions shall be in accordance with the indication rules in ISO 14405-3.

7.1 General

1st paragraph

Replace the text with the following:

This clause shows examples of the use of geometrical tolerances for dimensions which are not linear sizes or angular sizes. Geometrical tolerances can be used to avoid the ambiguity of dimensions with ± tolerances. Generally, requirements based on geometrical tolerances have no, or a very small, specification ambiguity.

8.1 Plus/minus tolerancing applied to angular distance

Delete the clause 8.1 and re-number accordingly:

Plus/minus tolerancing applied to angular distance

8.2 Examples of geometrical tolerancing applied to angular distance between two integral features

Re-number accordingly

Change 8.2 to:

8.1 Examples of geometrical tolerancing applied to angular distance between two integral features

Figure 11:

Change “ambiguous” to:

“size tolerance”

Change “unambiguous” to:

“geometrical tolerance” in 3 places.

Change title to:

“Example of an angular size for an angular feature of size (a) and three different solutions using geometrical tolerances between two integral features (b, c and d)”

8.3 Angular distance between an integral feature and a derived feature

Re-number accordingly

Change 8.3 to:

8.2 Angular distance between an integral feature and a derived feature