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STN	**Geometrické špecifikácie výrobkov (GPS) Pridruženie (ISO 4351: 2023)**	**STN EN ISO 4351** 01 4455

Geometrical product specifications (GPS) - Association (ISO 4351:2023)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EUROPÄISCHE NORM

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English Version

Geometrical product specifications (GPS) - Association (ISO 4351:2023)

Spécification géométrique des produits (GPS) - Association (ISO 4351:2023)

Geometrische Produktspezifikationen (GPS) - Assoziation (ISO 4351:2023)

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European foreword

This document (EN ISO 4351:2023) 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of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

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INTERNATIONAL STANDARD

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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.

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 213, *Dimensional and geometrical product specifications and verification*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 290, *Dimensional and geometrical product specification and verification,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is a geometrical product specifications (GPS) standard and is to be regarded as a general ISO GPS standard (see ISO 14638). It influences the chain links A, B, C, E, F and G in all chains of standards in the general ISO GPS matrix.

The ISO GPS matrix plan 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 the specifications made in accordance with this document, unless otherwise indicated.

For more detailed information on the relationship of this document to other International Standards and to the ISO GPS matrix model, see Annex C.

INTERNATIONAL STANDARD **ISO 4351:2023(E)**

Geometrical product specifications (GPS) — Association

1 Scope

This document gives the terminology and basic concepts of association, including objective functions and association constraints and material offset.

This document is not intended to specify association defaults and GPS syntax which are introduced in other (ISO GPS) International Standards.

NOTE The association can be used to establish for example:

— a datum;

— a reference feature for a geometrical specification or for a surface texture specification;

— an associated toleranced feature;

— any dimensional characteristic;

— an intersection plane, an orientation plane, a collection plane or a direction feature.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 17450-1, *Geometrical product specifications (GPS) — General concepts — Part 1: Model for geometrical specification and verification*

ISO 17450-4, *Geometrical product specifications (GPS) — Basic concepts — Part 4: Geometrical characteristics for quantifying GPS deviations*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17450-1 and ISO 17450-4 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
association
feature operation used to fit one or more ideal features to one or more *input features* (3.2) according to an association criterion

Note 1 to entry: The definition has been adapted from the definition of ISO 17450-1, to consider the term input feature.

3.2
input feature
<association> portion of an *associated feature* (3.3) or non-ideal feature, which is an extracted feature or a real feature, which can be filtered or not