Geometrical product specifications (GPS) - Surface texture: Areal - Part 72: XML file format x3p (ISO 25178-72:2017)

EESTI STANDARDIKESKUS EVS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA   NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 25178-72:2017 sisaldab Euroopa standardi EN ISO 25178-72:2017 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 25178-72:2017 consists of the English text of the European standard EN ISO 25178-72:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 07.06.2017.	Date of Availability of the European standard is 07.06.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Geometrical product specifications (GPS) - Surface texture: Areal - Part 72: XML file format x3p (ISO 25178-72:2017)

Spécification géométrique des produits (GPS) - État de surface: Surfacique - Partie 72: Format de fichier XML x3p (ISO 25178-72:2017)

Geometrische Produktspezifikation (GPS) - Oberflächenbeschaffenheit: Flächenhaft - Teil 72: XML Dateiformat x3p (ISO 25178-72:2017)

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

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European foreword

This document (EN ISO 25178-72:2017) 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of an identical text or by endorsement, at the latest by December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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.

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Endorsement notice

The text of ISO 25178-72:2017 has been approved by CEN as EN ISO 25178-72:2017 without any modification.

Contents

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 www.iso.org/directives).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

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

A list of all parts in the ISO 25178 series can be found on the ISO website.

Introduction

This document is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO 14638). It influences the chain link F of the chains of standards on profile and areal surface texture.

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 the specifications made in accordance with this document, unless otherwise indicated.

For more detailed information of the relation of this document to other standards and the GPS matrix model, see Annex C.

The x3p format was in use in industry and academia before the creation of this document. The x3p file format as defined in this document has been developed based on the definitions in ISO 5436-2. The openGPS®[1] consortium provides a free open source software implementation of this file format to avoid the inevitable inconsistency of multiple proprietary implementations.

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[1]   openGPS® is an example of a suitable product available commercially. This information is given for the convenience of users of this document and does not constitute an endorsement by ISO of this product.

Geometrical product specifications (GPS) — Surface texture: Areal —

Part 72:
XML file format x3p

1 Scope

This document defines the XML file format x3p for storage and exchange of topography and profile data.

2 Normative references

The following document is referred to in the text in such a way that some or all of its 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 25178-600[2]), *Geometrical product specifications (GPS) —Surface texture: Areal — Part 600: Metrological characteristics for areal-topography measuring methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 25178-600 and the following apply.

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

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

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

3.1
zip-container
file format that can be used as a container for multiple files and folders that does also support a compression of the stored content

Note 1 to entry: The file format description is in the public domain[1].

3.2
md5
method to calculate a unique 16-byte binary checksum used to check the integrity of files

Note 1 to entry: The binary value is typically represented by 32 hexadecimal digits.

Note 2 to entry: See Reference [2].

3.3
int16
2-byte representation of a signed integer

Note 1 to entry: The int16 type has a minimum value of −32 768 and a maximum value of 32 767.

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2) Under preparation. Stage at the time of publication: ISO/DIS 25178-600.