SLOVENSKI STANDARD
SIST EN ISO 52915:2017

01-maj-2017

Specifikacija za aditivno proizvodnjo formata (AMF), različica 1.2 (ISO/ASTM 52915:2016)

Specification for Additive Manufacturing File Format (AMF) Version 1.2 (ISO/ASTM 52915:2016)

Spezifikation für ein Dateiformat für Additive Fertigung (AMF) Version 1.2 (ISO/ASTM 52915:2016)

Spécification normalisée pour le format de fichier pour la fabrication additive (AMF) Version 1.2 (ISO/ASTM 52915:2016)

Ta slovenski standard je istoveten z: **EN ISO/ASTM 52915:2017**

ICS:

25.030	3D-tiskanje	Additive manufacturing
35.240.50	Uporabniške rešitve IT v industriji	IT applications in industry

SIST EN ISO 52915:2017 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Specification for additive manufacturing file format (AMF) Version 1.2 (ISO/ASTM 52915:2016)

Spécification normalisée pour le format de fichier pour la fabrication additive (AMF) Version 1.2 (ISO/ASTM 52915:2016)

Spezifikation für ein Dateiformat für Additive Fertigung (AMF) Version 1.2 (ISO/ASTM 52915:2016)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

The text of ISO/ASTM 52915:2016 has been prepared by Technical Committee ISO/TC 261 “Additive manufacturing” of the International Organization for Standardization (ISO) and has been taken over as EN ISO/ASTM 52915:2017 by Technical Committee CEN/TC 438 “Additive Manufacturing” 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of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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Endorsement notice

The text of ISO/ASTM 52915:2016 has been approved by CEN as EN ISO/ASTM 52915:2017 without any modification.

INTERNATIONAL STANDARD

ISO/ASTM 52915

Second edition
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Specification for Additive Manufacturing File Format (AMF) Version 1.2

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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.

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 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 261, *Additive manufacturing*, in cooperation with ASTM F 42.91, *Terminology*, on the basis of a partnership agreement between ISO and ASTM International with the aim to create a common set of ISO/ASTM standards on Additive Manufacturing.

This second edition cancels and replaces the first edition (ISO/ASTM 52915:2013), which has been technically revised. This revision contains changes to normative language and details of a minimum implementation, as well as corrections and clarifications.

Introduction

This International Standard describes an interchange format to address the current and future needs of additive manufacturing technology. For the last three decades, the stereolithography (STL) file format has been the industry standard for transferring information between design programs and additive manufacturing equipment. An STL file defines only a surface mesh and has no provisions for representing colour, texture, material, substructure and other properties of the fabricated object. As additive manufacturing technology is evolving quickly from producing primarily single-material, homogeneous objects to producing geometries in full colour with functionally-defined gradations of materials and microstructures, there is a growing need for a standard interchange file format that can support these features.

The Additive Manufacturing File Format (AMF) has many benefits. It describes an object in such a general way that any machine can build it to the best of its ability, and as such is technology independent. It is easy to implement and understand, scalable and has good performance. Crucially, it is both backwards compatible, allowing any existing STL file to be converted, and future compatible, allowing new features to be added as advances in technology warrant.

