SLOVENSKI STANDARD
SIST EN ISO/ASTM 52910:2019

01-december-2019

Dodajalna izdelava - Konstruiranje - Zahteve, smernice in priporočila (ISO/ASTM 52910:2018)

Additive manufacturing - Design - Requirements, guidelines and recommendations (ISO/ASTM 52910:2018)

Additive Fertigung - Konstruktion - Anforderungen, Richtlinien und Empfehlungen (ISO/ASTM 52910:2018)

Fabrication additive - Conception - Exigences, lignes directrices et recommandations (ISO/ASTM 52910:2018)

Ta slovenski standard je istoveten z: **EN ISO/ASTM 52910:2019**

ICS:

25.030	3D-tiskanje	Additive manufacturing

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Additive manufacturing - Design - Requirements, guidelines and recommendations (ISO/ASTM 52910:2018)

Fabrication additive - Conception - Exigences, lignes directrices et recommandations (ISO/ASTM 52910:2018)

Additive Fertigung - Konstruktion - Anforderungen, Richtlinien und Empfehlungen (ISO/ASTM 52910:2018)

This European Standard was approved by CEN on 12 August 2019.

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European foreword

The text of ISO/ASTM 52910:2018 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 52910:2019 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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO/ASTM 52910:2018 has been approved by CEN as EN ISO/ASTM 52910:2019 without any modification.

INTERNATIONAL STANDARD

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Additive manufacturing — Design — Requirements, guidelines and recommendations

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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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 ISO/TC 261, *Additive manufacturing*, in cooperation with ASTM F42, *Additive Manufacturing Technologies*, 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.

Additive manufacturing — Design — Requirements, guidelines and recommendations

CAUTION — This document does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this document to establish appropriate Health and Safety (H&S) practices and determine the applicability of limitations prior to use.

1 Scope

This document gives requirements, guidelines and recommendations for using additive manufacturing (AM) in product design.

It is applicable during the design of all types of products, devices, systems, components or parts that are fabricated by any type of AM system. This document helps determine which design considerations can be utilized in a design project or to take advantage of the capabilities of an AM process.

General guidance and identification of issues are supported, but specific design solutions and process-specific or material-specific data are not supported.

The intended audience comprises three types of users:

— designers who are designing products to be fabricated in an AM system and their managers;

— students who are learning mechanical design and computer-aided design; and

— developers of AM design guidelines and design guidance systems.

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/ASTM 52921, *Standard terminology for additive manufacturing — Coordinate systems and test methodologies*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/ASTM 52921 and the following apply.

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

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

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