SHORT COMMUNICATION



Standardisation efforts of ISO/TC 261 "additive manufacturing" 23rd plenary meeting of ISO/TC 261 "additive manufacturing"

Eujin Pei¹ · Marius Lakomiec²

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Abstract

The main objective of ISO/TC 261 is to standardise the processes of Additive Manufacturing, the process chains (Data, Materials, Processes, Hard- and Software, Applications), test procedures, quality parameters, supply agreements, environment, health and safety, fundamentals and vocabularies. This section provides readers with news regarding standardisation efforts of ISO/TC 261. Further up-to-date information regarding recently published documents, such as new standards, revised standards, and the status of standards, can be found in the ISO/TC261 webpages: https://www.iso.org/committee/629086. html and from the committee webpages: https://committee.iso.org/sites/tc261/home/news.html.

Keywords Standardisation · Standards · Additive Manufacturing

1 General updates

Handover of committee management from Mr. Yavuz Anik to Ms. Stephanie Terbrack from May 2024.

Permanent resolution on prerequisites needed for proposing a new project to be developed as an ISO/ASTM joint project under the PSDO.

Proposers for possible ISO/ASTM joint project (International Standard, Technical Specification and Technical Report) needs to be developed under the PSDO between ISO/TC 261 and ASTM F42, and should either originate from a P-member of ISO/TC 261 or an expert of ASTM F42 and its sub-committees.

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Eujin Pei eujinpei1@gmail.com

- ¹ Brunel University London, London, UK
- ² EOS GmbH, Krailling, Munich, Germany

2 New projects

Registration of ISO/ASTM PWI "Additive Manufacturing of Metals — Test Artifacts — Load bearing cross section area determination for small/medium size as-deposited specimens for mechanical properties determination", to be assigned to ISO/TC 261/JG 76 with a mature document for ISO/NP-ballot and ASTM F42.01 Sub-Committee Ballot until the end of Q2-2025 and to shorten the period of the ISO/NP-ballot from 12 to 8 weeks.

Registration of ISO/ASTM PWI "Additive manufacturing for metals — Non-destructive testing and evaluation — Imperfections classification in DED parts", to be assigned to ISO/TC 261/JG 59, where a mature document will be submitted to ISO/TC 261 for ISO/NP-ballot and ASTM F42.01 sub-committee-ballot until May 2024, and to shorten the period of the ISO/NP-ballot from 12 to 8 weeks.

3 Project updates

Re-registration of ISO/ASTM PWI 52947 "Additive Manufacturing — Feedstock materials — Nickel alloy UNS N06625 for Powder bed fusion", project to be re-registered as ISO/ASTM PWI 52947, as a preliminary work item, and to shorten the period of the ISO/NP-ballot from 12 to 8 weeks, with the provision of a mature document to be submitted for ISO/NP- and ASTM F42.05 Sub-committeeballot until the end of April 2025.

4 Project stage updates

Skipping of CD-stage for ISO/ASTM 52946 "Additive manufacturing of metals — Finished part properties — Stainless Steel Alloys made by powder bed fusion", for the project to be registered as stage code 30.99 "CD approved for registration as DIS".

Skipping of CD-stage for ISO/ASTM 52951 "Additive Manufacturing — Data — Data packages for AM parts", for the project to be registered as stage code 30.99 "CD approved for registration as DIS".

Skipping of CD-stage for ISO/ASTM 52954–1 "Additive manufacturing — Qualification principles — Part 1: Common failure modes used for risk mapping", for the project to be registered as stage code 30.99 "CD approved for registration as DIS".

5 Project extensions

Extension of project development timeframe for ISO/ASTM DIS 52953 "Additive manufacturing for metals — General principles — Registration of geometric data acquired from process-monitoring and for quality control" from 24 to 36 months.

6 Revisions

None.

7 Change of name and scope/merging of projects

None.

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