
ASME Additive Manufacturing for Nonmetallic Materials Applications

AMSC Feedstock Materials for Additive Manufacturing

July 13, 2021

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What is ASME?



- Standards
- Certification
- Conformity Assessment
- Courses
- Conferences
- Publications
- ASME.org
- Education
- Membership
- Industry Events

ASME helps the global engineering community develop solutions to real-world challenges



ASME Standards & Certification

- Leading international developer of standards
 - Developing standards since 1880
 - Approximately 600 standards
 - Accepted for use in more than 100 countries
 - 70 Consensus Committees
 - 700 Total Committees
 - 5 Supervisory Boards
 - Close to 6,000 Volunteers (800 International and growing)
 - 12 Conformity Assessment Programs

ASME Additive Manufacturing Standards Activity

ASME Standards Ongoing Activity

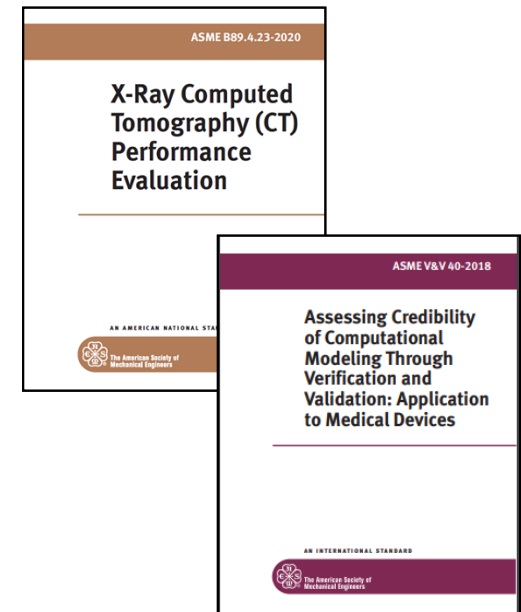
- Y14.5 Dimensioning and Tolerancing
- Y14.37 Product Definition for Composite Parts
- Y14.41 Digital Product Definition Data Practices
- Y14.46 Product Definition for Additive Manufacturing
- Y14.47 Model Organization Practices
- Y14.48 Universal Direction & Load Indicators



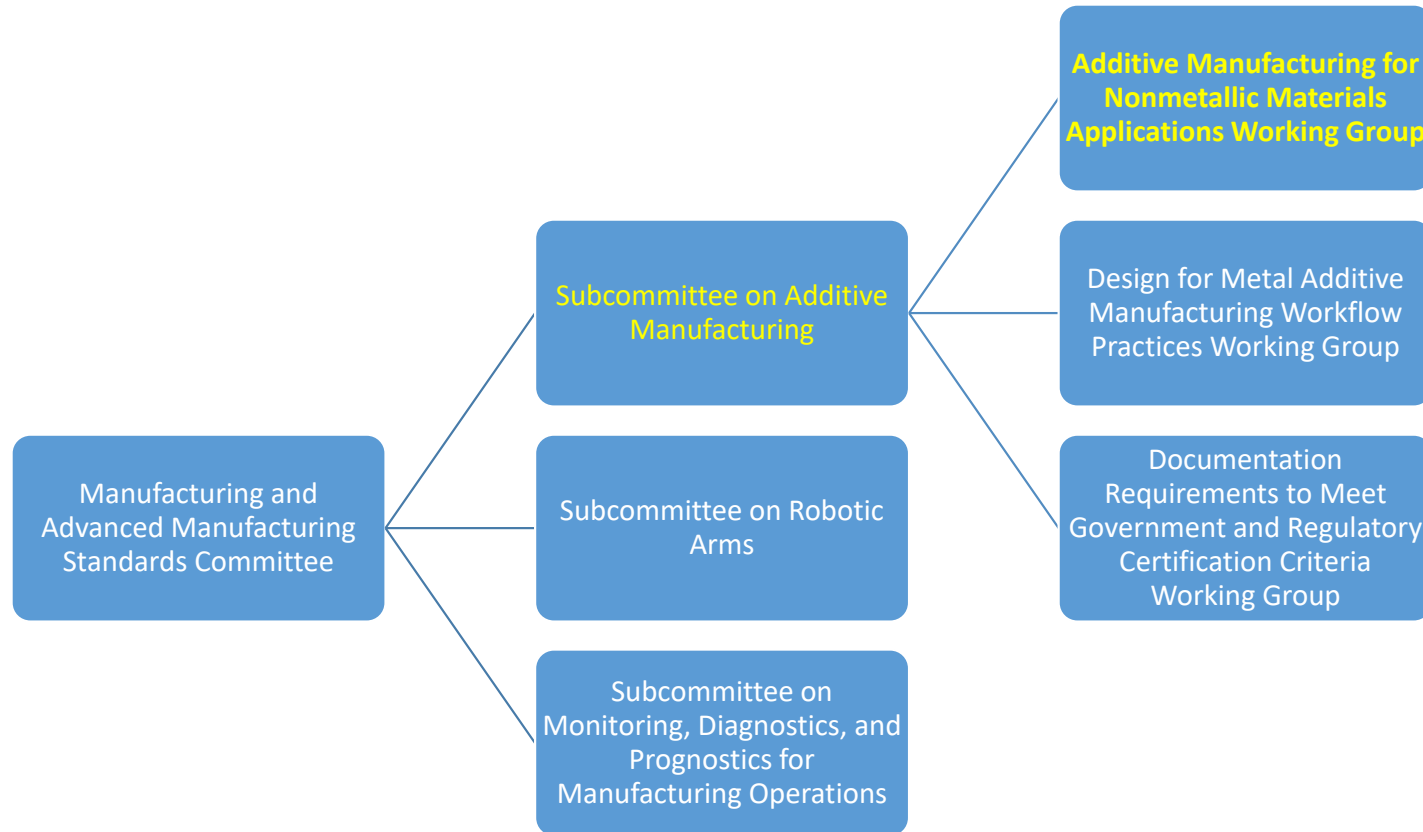
ASME Additive Manufacturing Standards Activity

ASME Standards Ongoing Activity

- B46 Surface Texture, Appendix B and K
- B89.4.23 X-ray Computed Tomography (CT) Performance Evaluation
- PTB-13 -2021 Criteria for Pressure Retaining Metallic Components Using AM
- BioPrinters
- MBE Model Based Enterprise
go.asme.org/mbereport
- VVUQ of Computational Models -Solids, Fluids, Credibility Assessment



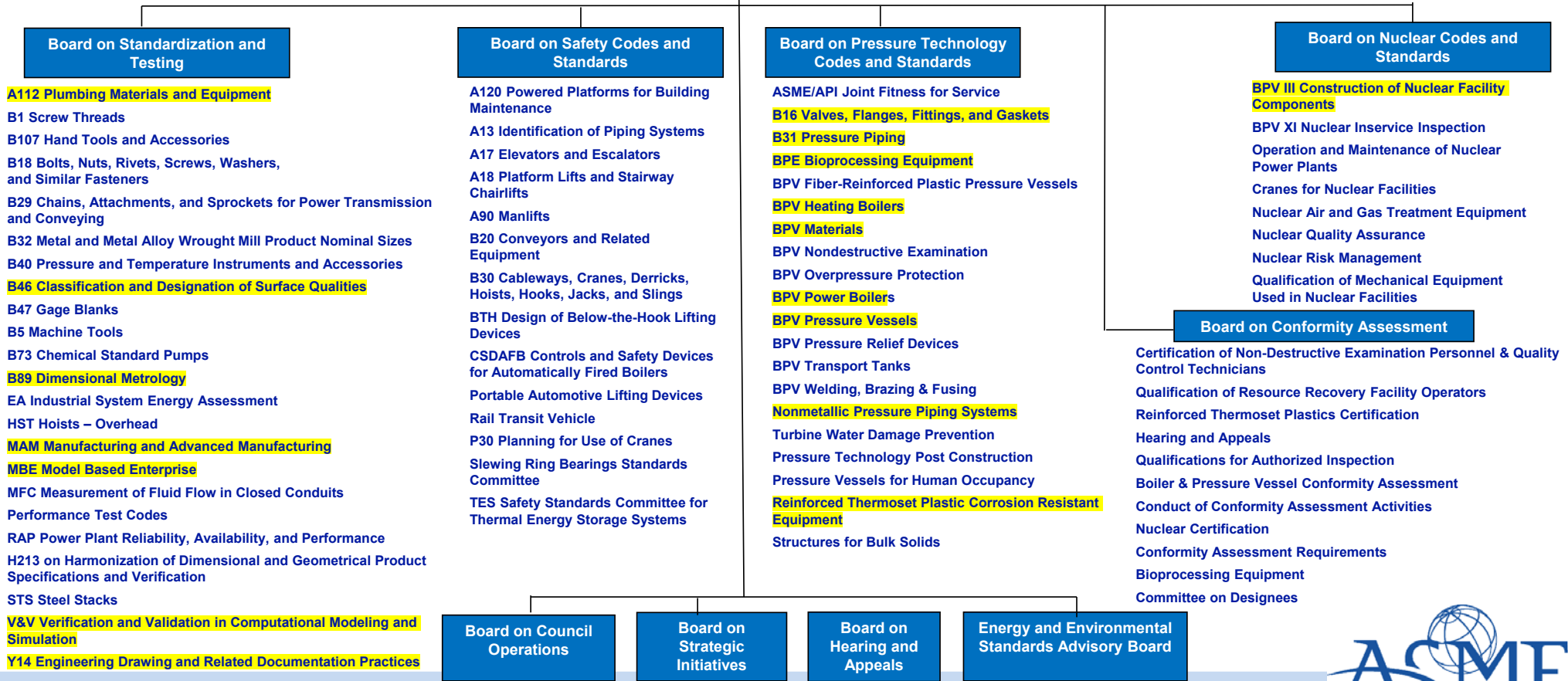
Subcommittee on AM Committee Organization



Nonmetallic Materials Applications Working Group

- First meeting in April 2021 and have been meeting monthly to discuss potential opportunities-Next Meeting today July 13, 2021, 4-5:30 PM ET
 - Proposed project teams are currently forming.
 - Project teams meet during breakout sessions associated with the monthly meeting or via supplemental project team meetings.
 - Project teams are tasked to review existing literature and standards.
 - Current topics brought up by PTs: Feedstock material selection and qualification (biocompatibility), supply chain control, using material science to help engineer the part and replacement of metallic parts using nonmetallic materials.

ASME Council on Standards and Certification



American Society of Mechanical Engineers – Learn More and Contact Information

To learn more about ASME AM related Standards:

<https://cstools.asme.org/csconnect/FileUpload.cfm?View=yes&ID=65268>

Join a Committee:

<https://www.asme.org/codes-standards/asmecode-committee/get-involved>

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Thank you

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