Evolution of standardisation project on AM - general principles, main characteristics and corresponding test methods

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The draft ISO/ASTM CD 52927 'Additive manufacturing - General principles - Main characteristics and corresponding test methods' has changed from status CD ('Committee Draft' - draft for enquiry, subject to members input) to DIS ('Draft International Standard' - draft for enquiry, subject to public input). This draft specifies the main requirement for testing and characterising of metallic, ceramic or polymer parts manufactured by additive manufacturing.

The document provides:

- A list of quality characteristics of parts and the corresponding test procedures
- Recommendations on the scope and content of test and part supply agreements
- Information on monitoring the process
- Annexes on test methods for metallic, polymer and ceramic materials including the following:
    - Definition of criticality of part
    - Surface requirements
    - Geometric requirements
    - Mechanical requirements;
        - Hardness
        - Tensile strength
        - Impact strength
        - Compressive strength
        - Fatigue strength
        - Crack extension
    - Physical and chemical property requirements
    - Performance criteria and quality characteristics

In addition, the document contains a comprehensive list of standards for various (mechanical) testing and characterisation methods.

If you require any further information, do not hesitate to contact our Additive Manufacturing team!

Authors



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