



# Evolution of standardisation project on AM - principles, characteristics and test methods

01 December 2022, 13:44

Guido Heunen

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



Guido Heunen