Multi Material Jetting

Selective drop deposition

Particle-filled thermoplastic feedstocks

- Droplet volume: 0.5 nl 45 nl
- Droplet diameter: 200 μm >1000 μm
- Layer heights: 70 μm 300 μm

Solidification by cooling

No additional solidification mechanism necessary

ightarrow nearly unlimited material portfolio

Multi Material Components

Up to six printheads

- six different materials
- five different materials + support
- parallel manufacturing of multifunctional components







Our Multi-Material Solution



Multi-material parts could be made in a single build, but fulfil a wider range of functions, like more complex but harder to manufacture assemblies.

Parts like assemblies



Materials

Different materials provide different functional properties for the part.

Shaping technology

An additive manufacturing technology that is capable of using multiple materials within any single layer of a build would allow for the creation of parts with a wider range of functions (functional properties).

LTCC

Electrical conductive | Insulating

LTCC:

51528B (Heraeus, Germany)

ightarrow Solid content up to 52 vol.-%

Functional component:

Silver (Heraeus, Germany)

ightarrow Solid content up to 37 vol.%

Specific electrical resistance: 1,3 x 10-6 Ω cm

Minimal line width (green): 500 μ m

