

## Press release

Hanau, November 10, 2016

### **Heraeus makes the complex design of amorphous metals possible for the first time through additive manufacturing**

- **Formnext in Frankfurt: Heraeus expands its portfolio of high-melting-point high-tech materials for 3D printing**
- **Amorphous metals encourage a variety of new applications and designs**

Heraeus will demonstrate additive manufacturing with amorphous metals for the first time at the Formnext international exhibition in Frankfurt (November 15-18, Hall 3.1/C20). Amorphous metals are an innovative class of materials that make completely new high-tech applications possible. In addition, the technology group is expanding its portfolio of high-melting-point high-tech materials for 3D printing by introducing twelve new high-quality metal powders with improved flow properties. Tungsten and gold are among the elements included in the newly developed metal powders and special alloys. "Thanks to additive manufacturing, bulk amorphous metals with new design possibilities will for the first time be broadly accessible to a mass market – not only in their long-awaited use as a structural material, but also in the near net shape manufacturing of high-strength components with complex geometries and sophisticated designs," explains Tobias Caspari, head of 3D Printing at Heraeus.

In this way, Heraeus is making the complex design of amorphous metals possible for the first time. Through a technology partnership with the Swedish firm Exmet, agreed upon in June 2016, Heraeus has expanded its portfolio of 3D printed metals with this highly sought-after group of materials. Amorphous metals are suitable for an exceptional number of high-tech applications. They are shock-absorbing and scratch-proof, while still having very good elastic properties – making them an attractive option for injectors, casings for consumer electronics, and dome tweeters for speakers. (See infographic)

#### **More information about the Heraeus additive manufacturing:**

[https://www.heraeus.com/en/group/products\\_and\\_solutions\\_group/3\\_d\\_printing/home\\_additive\\_manufacturing.aspx](https://www.heraeus.com/en/group/products_and_solutions_group/3_d_printing/home_additive_manufacturing.aspx)

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