

Press release

Düsseldorf, September 20, 2016

For the first time, digital printing on glass with real gold: Heraeus presents new Inkjet Gold

- **For the first time, glass and ceramic surfaces can be digitally decorated with precious metals preparations**
- **Heraeus Inkjet Gold can be applied with many conventional print heads**

The world of creative decorations is richer by one innovation: With Heraeus Inkjet Gold, substrates such as glass or ceramics can now also be digitally printed with real gold. The technology company Heraeus is introducing its latest development to the field at the glasstec trade fair in Düsseldorf on September 20–23, 2016, in Hall 12 at Booth A37.

Until now, the industrial precious metals decoration of glass and ceramic could be done only with direct screen printing, by direct thermoplastic printing, or with decals. Now, the liquid precious metal preparation can be applied to smooth surfaces, such as tiles or perfume bottles, in a digital printing process as well. Heraeus Inkjet Gold can be used with conventional print heads. The printing temperatures, between 25 and 50°C, are comparable to those in other methods. After printing, the products are fired at approximately 800°C – producing a lustrous gold film about 150 nanometers thin.

Digital printing in glass decoration is gaining ground

With Inkjet Gold digital printing, high-quality and sharply contoured finishes can be produced readily and with almost no odor. Digital printing also allows for flexible and customizable reproduction. Designs can be changed more easily and flexibly than with conventional printing methods – allowing for economical production of very small print runs and even individual items. People who appreciate specialty items can now also add real gold.

Furthermore, Inkjet Gold can also be combined with ceramic colors. If the finished product is to be used as exterior decoration, it is advisable to coat the gold with a protective lacquer to increase its resistance to corrosion and abrasion.



With Heraeus Inkjet Gold, smooth glass surfaces, such as tiles or perfume bottles, can be decorated with real gold by digital printing.

Heraeus, the technology group headquartered in Hanau, Germany, is a leading international family-owned company formed in 1851. With technical expertise, a focus on innovation, operational excellence, and an entrepreneurial leadership, we strive to continuously improve our business performance. We create high-quality solutions for our clients and strengthen their competitiveness in the long term by combining material expertise with technological know-how. Our ideas are focused on themes such as the environment, energy, health, mobility, and industrial applications. Our portfolio includes everything from components to coordinated material systems, and our products are used in a wide variety of industries, including the steel, electronics, chemical, automotive, and telecommunications industries. In fiscal year 2015, Heraeus earned product revenues of €1.9 billion and precious metals trading revenues of €12.9 billion. With around 12,600 employees worldwide in more than 100 subsidiaries in 38 countries, Heraeus holds a leading position in its global markets.

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