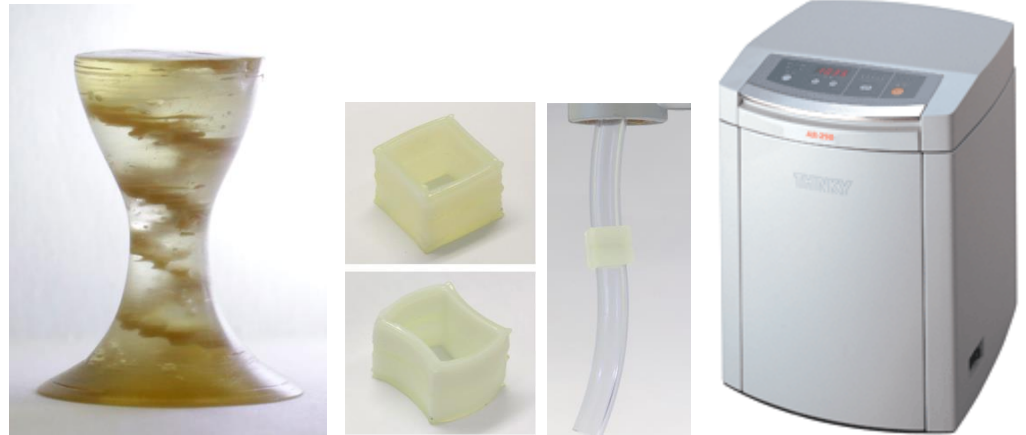


THINKY ARE-250

Mixing and degassing machine



Customer

ETH Zurich University

Customer benefits

- Trouble-free printing process
- Consistent, homogeneous results

THINKY ARE-250 mixes 3D printing materials homogeneously

There have been significant advances in the field of additive manufacturing, with both material and process developments driving new applications.

A team of material scientists at ETH Zurich University have been developing new materials for 3D printing which deliver additional functionality. They use Direct Ink Writing methodology, where the material is extruded as a filament and built up in layers via a nozzle. The object is built by 'writing' the required shape layer by layer.

By combining a number of materials using different mix ratios and adding inorganic fillers, ETH Zurich is increasing the possibilities for 3D printing in two key areas. First is the possibility of combining multiple materials in a single geometry with precise definition. Second is the control of the orientation of anisotropic particles used as building blocks during a direct ink-writing process. Particle orientation control is demonstrated by applying low magnetic fields on deposited inks pre-loaded with magnetized stiff platelets. Outcomes include programmable material properties, such as shape-changing.

*"Homogeneous mixing of the print materials is vital to carrying out a trouble-free printing process. To ensure that the source material mixes homogeneously with the fillers, we use the **THINKY ARE-250**," report the scientists.*

THINKY ARE-250 Mixer

- Fast mixing
- Degas and remove bubbles at the same time
- Mix in your product container
- Non-invasive
- From low viscosity to semi-solid materials
- Dry particle mixing
- Degasses filled syringes
- No cleaning between batches
- Consistent quality with all digital controls
- Multi-step mixing
- Hands-free processing

Applications include: Formulating and mixing adhesives, sealants, moulding compounds, lubricants, slurries, coatings, inks, paints, abrasives, bio chemicals, cements, medical compounds, cosmetics/personal care materials, detergents, conductive pastes, dental materials, foods, construction materials or any other materials which are hard-to-mix, hard-to-degas, or hard-to-wet.



**Contact us for more information on
our mixing equipment**

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