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3D PRINTER RECREATES RODIN'S THINKER IN MINUTES

 TELECOMMUNICATIONS

Researchers at Berkeley advance 3D printing

Spotted: Researchers at Berkeley have created a 3D printer that turns liquids into solid objects in a matter of minutes. A series of computer images of a single object are projected onto a rotating cylinder filled with 3D printing resin (a gooey looking liquid). The liquid hardens as it is exposed to light, taking the form of the object projected onto it.

The process differs from traditional 3D printing, which builds an object up layer by layer. This one prints everything in one go. The projector runs through the images and they are 'burned' on the liquid and rotated around. The new object is created as the cylinder rotates.

The result is smoother, more flexible and more complex objects. The printer can make objects up to four inches in diameter and can add printed parts to an existing object, according to the team. They have already created a replica of Rodin's Thinker and a handle for a screwdriver.

An application has been filed for a patent on the technique.

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Takeaway:

The Berkeley team named the printer "Replicator" after the device used in Star Trek and this printer definitely seems like something straight from science fiction. Its "all at once" capability means it can produce a range of objects, which were previously too complicated for traditional 3D printing. The printing resin is completely reusable, so it will also create less waste. This liquid printer has the potential to open new areas of innovation in 3D printing technology. We are already seeing printers make pizza and manufacturing parts in space. The automotive industry, medicine and even the toy industry is working on 3D printing applications as well.