Written by Marco Attard 26 November 2015

Toshiba presents a prototype 3D metal printer promising fabrication speeds up to 10x faster than printers using powder bed fusion, the current most common metal sintering technology.



The printer uses laser metal deposition (LMD)-- a technology that deposits powdered metal and fires a laser beam in tandem. A high-speed nozzle based on Toshiba fluid simulation technology reduces the area where metal particles are injected, while the laser focuses very precisely on the tiny powder-covered area.

The result, the company says, is a prototype reaching fabrication speeds of 1100cc an hour with 800W laser output. The printer uses stainless steel, Inconel and iron materials, and is able to build larger structures at lower costs.

Toshiba says it is currently improving on the prototype to deliver further speed and resolution increases, before the final LMD 3D printers hit the market by 2017.

Go Toshiba and Toshiba Machine Develop 3D Metal Printer