Silicon valley 3-d printing startup gets \$81 million in new funding

Business



Carbon, a Silicon Valley startup that is developing 3-D printers to produce medical devices and car parts on demand, said on Thursday it had closed on \$81 million in funding that brought the total it has raised to \$222 million.

" We wanted to go find investors that share the scope of our vision and realize what we are talking about here is industrial re-invention," Kirk Phelps, Carbon vice president of product management, told *Reuters* at the company's headquarters in Redwood City, Calif.

Founded in 2013, Carbon said the funding round was led by automaker BMW Group, industrial conglomerate General Electric Co., optics and imaging products company Nikon Corp. and chemical manufacturer JSR Corp. They joined earlier investorsGoogleVentures and top tech venture capital firm Sequoia.

" They did an incredibly good job in getting investors," said Terry Wohler of Wohler Associates, an additive manufacturing consultancy firm based in Colorado.

However, Wohler said " the jury is still out" on whether Carbon'stechnologycan match the durability of injection molding, the current industry standard for producing plastic products, or come close to its price point.

The company's first commercial 3-D printer, the M1, is available for a \$40, 000 annual subscription. It uses software that controls a photochemical process that balances the way ultraviolet light and oxygen react within a pool of polymer resin to print plastic objects.

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Carbon has developed various resins to diversify what can be printed. It uses heat-resistant hard resins for exterior automotive parts and soft elastic biodegradable resins for medical devices like heart stents.

The company says it can print up to 100 times faster than rival 3-D printing companies. That would be a selling point to the manufacturing industry, which until now used 3-D printing primarily as a prototyping tool.

" You can imagine that if we give clients a great on-demand manufacturing tool, it's not just the product that changes," Phelps said. " It's the business that changes."

Carbon said it would use the proceeds and newly formed partnerships with JSR and Nikon to fund its first push into international markets and to develop its technology further.

(Reporting by Ben Gruber in Redwood City, Calif.; Editing by Lisa Von Ahn)