Affordable 3D printer heating up on Kickstarter

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When the printing site *3DPrint.com* heard of a company planning to promote a printer affordable to many, "we had flashbacks from last year when a number of incredibly cheap machines launched crowdfunding campaigns only to close up shop before their campaigns even got off the ground," said Brian Krassenstein. A certain measure of skepticism is healthy when the pricetag is below $200, he said, because certain components within a 3D printer which are required" will "put a floor under its production costs."

Now, however, a group called Tiko 3D has launched a Kickstarter campaign for a 3D printer which they said is a worthy printer with a low price made possible through their cost-saving production techniques. Tiko is a delta 3D printer with three sets of arms moving in unison to control the movement of the print head.

"Heavy. Over-complicated. Unreliable." These were things that bothered the team about printers they had seen and they believed they could do better by making their own, which could cost less. Why, they asked, do 3D printers have to be so expensive?

They key to their cost-saving formula is in the word "Unibody." They call Tiko the "Unibody printer." They said, "In most 3D printers, the most expensive (by far) item is the frame. That's because most 3D printers have a frame built from multiple beams that are fastened together. In delta printers, this frame is often made from three vertical extruded-aluminum beams. We had a simple thought… what if we extruded all three rails together?"

"Instead of relying on several rails which enable movement of the extruder head," said Krassenstein, "this machine builds the rails into the chassis, creating one solid piece which according to the company results in more reliable and accurate printing, while at the same time, reducing costs." Timi Cantisano in *Neowin* called out the technical advantages in using the unibody frame design with a direct-drive printer head module. "That means unlike traditional 3D with rails, Tiko will offer better stability resulting in less calibration. This will also promote less misalignments during the printing process resulting in more accurate prints."

The team listed the features of the printer including an internal filament tray, large print volume, flexible base, wireless connectivity, and cloud-

based software, so you can print from almost anywhere, they said, on any Internet-friendly device. They also said you can print large objects and remove them easily. "Tiko's print bed is flexible, so once your print is done, you simply lift the printer off the bed, then twist to pop off your print."

What is more, Tiko uses nonproprietary 1.75mm filament on a standard 1kg 165mm (6.5 in.) diameter spool, so you can experiment with different materials. An onboard accelerometer automatically shuts the printer down if it's disturbed. The printer weighs 3.7 pounds.

Krassenstein said the printer was "foreign to anything we have seen on the market in the past."

While confident they had an attractive campaign item, the level of response surprised them: Earlybird price offerings are all gone and with a $100,000 goal they gathered more than that, $431,752 at the time of this writing, with 28 days to go. They said their Earliest Bird deal was gone in under three minutes and they went past their goal in three hours.

A pledge of $179 gets a Tiko printer and one standard 1kg spool of 1.75mm filament. Estimated delivery is November.

More information: — www.kickstarter.com/projects/t … -printer/description

—tiko3d.com/