



**November 14, 2018**

**CONTACT**

**FOR IMMEDIATE RELEASE**

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## **LulzBot Expands Into High-Strength 3D Printing**

LOVELAND, COLORADO, USA – Aleph Objects, Inc., manufacturers of award-winning LulzBot 3D Printers, announced the availability of the LulzBot HS-Series Tool Heads today. There are increasing demands for engineered polymers with exceptional mechanical and thermal properties. The new HS (hardened steel) tool heads enable 3D printing of industrial-grade composites, such as polyamide (nylon) infused with carbon fiber or glass for high-strength 3D prints.

The LulzBot HS-Series Tool Heads are capable of printing industrial composites with a tensile strength yield comparable to PEEK (tensile strength of 15,200 psi - ASTM638). These polymers are used in a wide range of high-demand applications, from structural components to the automotive industry. Parts printed with these composites have higher impact resistance, resist deformation, while retaining strength in harsh and demanding environments. Industrial materials like PA-CF Low Warp combine strength and dimensional stability (less than 2% elongation at break - ASTM638) with the ability to perform in higher operating temperatures up to approximately 120° C (248° F). The ability to create high-strength functional jigs, fixtures, and prototypes on-site in a matter of hours significantly reduces lead time and cost.

Featuring hardened steel components for maximum durability, these tool heads are purpose-built for high-strength 3D printing applications with abrasive and industrial composites. The hardened steel extruder hobb is optimally designed to minimize wear from abrasive composite filaments, and the larger heating block enables high-volume throughput of larger-diameter filaments. Even with abrasive composite filament, the hardened-steel nozzle maintains dimensional accuracy. Objects printed with the HS-Series tool heads will be stronger due to better layer adhesion and thicker walls.

The [LulzBot HS Tool Head](#) features a 0.8 mm nozzle for more precise high-strength 3D printing, and the [LulzBot HS+ Tool Head](#) comes with a



1.25 mm nozzle for high-strength, high-speed 3D printing. From the 0.25 mm SL (small layer) tool head to the new HS-Series tool heads, the LulzBot ecosystem offers a broader range of layer heights and filament capabilities than ever before. These new tool heads further expand the vast supported material palette and capabilities of LulzBot 3D Printers, enabling exceptional out-of-the-box 3D printing performance for new and existing users.

- more -

### **Graphic Assets (Links)**

- Logos
  - [Aleph Objects, Inc.](#)
  - [LulzBot](#)
- Images
  - <https://own.alephobjects.com/s/fMfbdRcEjyzCR45>

### **Praise for LulzBot Desktop 3D Printers**

LulzBot Desktop 3D Printers are widely acclaimed by critics and customers alike for reliability, robustness, respect for user freedom, ease of use, excellent customer support, and extensive documentation.

### **Praise for the LulzBot TAZ**

*All3DP* 2017/2018 “Best Large Format Printer” *Tom's Guide* “Editors' Choice”  
*Make:* 2016 Guide “Best Overall” *3D Hubs* 2017 Buyers Guide “Best of Work Horse”  
*Make:* 2016 Guide “Outstanding Open Source” *Aniwaas* 2016 Best 3D Printers (No. 1 out of 980)  
*Make:* 2015 Guide “Most Maker Machine” *3DPrint.com* 2015 Buyers Guide  
*3D Printing Industry* “Top 3D Printer Under \$2,500” *3DForged* “Best Printer Under \$3,000”

### **Praise for the LulzBot Mini**

*All3DP* 2017/2018 “Editor's Choice” *PCMag* “Editors' Choice”  
*Make:* 2018 Guide “Best for Education” *3D Hubs* 2017 Buyers Guide “Best of Plug 'N' Play”  
*Inc.* “15 Coolest Products of 2015” *Aniwaas* 2016 Best 3D Printers (No. 4 out of 980)  
*Tom's Guide* “Best Intermediate 3D Printer 2018” *3DForged* “Best 3D Printers 2016”  
*Tech Radar* “10 Best 3D Printers 2015” *3D Printing Industry* “Top 3D Printer Under \$2,500”

### **About Aleph Objects, Inc.**

Founded in January 2011 and built on the philosophy of user freedom, Aleph Objects, Inc. is a Free Software, Libre Innovation, and Open Source Hardware company. Headquartered in Loveland, Colorado, Aleph Objects designs, develops, and manufactures the award-winning LulzBot line of 3D printers. Find a full press kit here: [www.lulzbot.com/press/](http://www.lulzbot.com/press/)



### **Praise for Aleph Objects**

*Inc. 500* Computer Hardware Company  
(#2 2017, #1 2016)  
Top 250 Private Companies (*CoBizMag*)  
Colorado Companies to Watch - Winner  
(*CCTW*)  
Colorado Company of the Year - Runner-Up  
(*CTA*)

*Inc. 500* Fastest-Growing Company  
(#371 2017, #122 2016)  
Top 250 Colorado Manufacturers (*CoBizMag*)  
Fastest-Growing Co. in Northern Colorado  
(*BizWest*)  
Small Business of the Year - Finalist (*FCACC*)

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