

Alpharetta (USA) AM Capabilities

Alpharetta Additive Manufacturing Labs

The Alpharetta location of Syensqo's Specialty Polymers possesses a comprehensive Applications Development Lab dedicated to Additive Manufacturing:



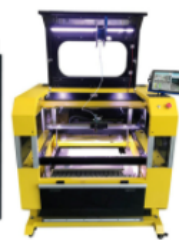
This lab was built and dedicated to AM in late 2017 and early 2018, with the goal of supporting the development of Syensqo materials and products specifically for AM processes (mainly filament and powder-based AM technologies). The goal of this lab and its personnel has since expanded greatly since then to include rapid prototyping, customer support, production of internally-requested tools, jigs, and test fixtures, and support of other Syensqo business opportunities through AM routes.

Lab Goal: “To develop and explore innovative solutions and applications for and with our customers through the designing, prototyping, and testing of application designs and parts via AM”

Alpharetta Printer Capabilities

Alpharetta currently possesses five different models of 3D printers: one capable of printing powder via Selective Laser Sintering (SLS) and four capable of printing filament via Fused Filament Fabrication (FFF). All of these printers boast differing capabilities and can be used for different applications, print features, final part properties, and ease of use.

Printer images roughly to scale with one another



	EOSINT P800	Stratasys F900	Roboze Argo 500	AON3D M2	Hyrel Hydra 16A
Type	Powder (SLS)	Filament (FFF)	Filament (FFF)	Filament (FFF)	Filament (FFF)
Chamber Temp	385°C	230°C	180°C	120°C	n/a
Extruder Temp	n/a	450°C	450°C	450°C	450°C
Printing	Fully Unlocked System with Caveats	Partially Unlocked System for Printing Experimental Materials	Fully Unlocked	Fully Unlocked	Fully Unlocked

Printer	Printer Type	Printer Manufacturer (and Link)	Location at Alpharetta	Current Main Contact
EOSINT P800	Powder (SLS)	Electro Optical Systems (EOS)	AM Lab	Chris Ward (chris.ward@syensqo.com)
Stratasys F900	Filament (FFF)	Stratasys, Ltd.	AM Lab	Chris Ward (chris.ward@syensqo.com)
Roboze Argo 500	Filament (FFF)	Roboze, S.P.A.	AM Lab	Chris Ward (chris.ward@syensqo.com)
AON3D AON M2	Filament (FFF)	AON3D (Made in 3D Canada, Inc.)	ADL Lab	John Stephenson (john.stephenson@syensqo.com)
Hyrel Hydra 16A	Filament (FFF)	Hyrel 3D	AM Lab	Chris Ward (chris.ward@syensqo.com)

Alpharetta Peripheral Capabilities

Alpharetta also possesses many other peripheral equipment that is specifically related to and supports Additive Manufacturing. This equipment includes filament production (single-screw extrusion, drawing modules, and filament winding), powder milling (near-production-scale, pilot-scale, and lab-scale), powder sieving (pilot-scale, near-pilot-scale, and lab-scale), and post-printing processing via a glass bead blasting cabinet for SLS. Additionally, Alpharetta possesses a myriad of analytical equipment for extremely in-depth evaluation and analysis of materials that can be suited for AM.