

Developed Technical Knowledge and Reports

Syensqo has been investing R&I resources into Additive Manufacturing (AM) for many years now. Over this time, much internal knowledge and experience has been gathered and developed. Virtually all of this knowledge has been captured and documented in internal reports. These reports have been written by various individuals and all stored according to Syensqo policies within M-Files /KMS^2. If desired, please follow the normal procedures in order to request access to specific reports. The current reports are summarized below.

Technology Type	Report Title	Document Number	Type	Short Summary
Fused Filament Fabrication (FFF)	Additive Manufacturing of High Performance Polymers via Fused Filament Fabrication (FFF): Evaluation of KetaSpire® PEEK and Radel® PPSU in FFF Printing	5262	Developed Knowledge	Initial development of Syensqo's filament products
	Additive Manufacturing of High Performance Polymers (HPP) via Fused Filament Fabrication (FFF), Part II. Evaluation of Next Generation Candidates for FFF	5296	Developed Knowledge	Further development and improvement of Syensqo's filament products
	Sulfone Filament for Fused Deposition Modeling Aerospace Applications	11443	Developed Knowledge	Development of a sulfone filament possessing fire retardant properties for aerospace applications
	Development of PPA filament for Additive Manufacturing	11459	Developed Knowledge	A review of possible polyamide products within Syensqo's portfolio and development of filament from the best candidates
	Evaluation of PPS and Polyamide Compounds for Fused Filament Fabrication Additive Manufacturing	11441	Developed Knowledge	Internal study into the development of potential PPS and polyamide filament for FFF
	Solmyra® FTPE for Fused Filament Fabrication Additive Manufacturing	11357	Developed Knowledge	Internal investigation into filament printing of Solmyra® FTPE
	Additive Manufacturing Filament Process Development	11356	Developed Knowledge	Internal investigation into the improvement of filament quality for Syensqo filament products
	Polymer Physics of Additive Manufacturing: Welds, Polymer Relaxation, and Crystallization Kinetics	-	Developed Knowledge	A study of filament printing as it relates to modeling and polymer physics
	Competitive Analysis – Ensinger/Victrex Unfilled and 30% Carbon-Filled PEEK AM FFF Filament	11452	Competitive Analysis	An internal investigation into Ensinger filament composed of Victrex PEEK
Continuous Fiber (CF3D)	Development of AM-ready Filament Reinforced by Continuous Carbon Fiber	11350	Developed Knowledge	Development of continuous-reinforced carbon fiber PEEK filaments
Selective Laser Sintering (SLS)	Selective Laser Sintering – Part I: Introduction to SLS and Initial Efforts Toward Understanding the Technology	11333	Developed Knowledge	An introduction to SLS and Syensqo's initial research into SLS
	Selective Laser Sintering – Part II: Development of PEKK Powder for SLS	11436	Developed Knowledge	Syensqo's developmental efforts towards developing a polyetherketoneketone (PEKK) polymer powder for SLS
	Selective Laser Sintering – Part III: Evaluation of a Differentiated Polyaryletherketone Powder	11448	Developed Knowledge	Syensqo's developmental efforts towards developing a new, differentiated polyaryletherketone (PAEK) polymer powder for SLS and how it compares to PEKK
	Evaluation of Structured Polymers' PA12 Micropowder	5203	Competitive Analysis	An internal investigation into filled PA12 powder produced by Structured Polymers
	Competitive Analysis of Toray AM-Ready PPS Powder	11353	Competitive Analysis	An internal investigation into PPS powder reportedly produced for SLS by Toray