



**ASA**  
Fused Deposition Modeling (FDM)  
ASA (Acrylonitrile Styrene Acrylate) is a UV-stable, production-grade thermoplastic. In addition to being UV-stable, ASA is consistent in color part to part, providing ease of finishing and a good cosmetic appearance. These features when combined with mechanical properties on par with ABS-M30 make ASA an ideal material choice for production applications. Available in sparse or solid fill.

**Polylactic Acid (PLA)**  
Fast and Economical Design Verification. A stiff thermoplastic made from renewable resources, PLA is perfect for quick concept verification at a low cost. It works with fast-draft mode on the Stratasys F123 series and comes in 11 different color options. PLA also has a low melting point, which means it requires less heat and power to print parts.

**ABS-CF10**  
Stratasys ABS-CF10 combines standard ABS (acrylonitrile butadiene styrene) material with 10% chopped carbon fiber by weight. The result is a low moisture-sensitive FDM® thermoplastic 50% stiffer and 15% stronger than standard ABS 3D printing material. Typical applications include manufacturing tools, jigs, fixtures, and end effectors that benefit from the combination of increased stiffness and reduced weight

**FDM TPU 92A**  
Produce Large and Complex Elastomer Parts  
Create accurate elastomer parts quickly and efficiently with the ease and reliability of professional FDM 3D printing. The durable elasticity of FDM TPU 92A material makes it a good choice for a wide variety of applications including flexible hoses, tubes, air ducts and vibration dampeners.



STRATASYS F170 3D PRINTER Model	AVAILABLE MATERIALS			
	ASA	PLA	ABS-CF10	FDM TPU 92A
Tensile strength (peak) <sup>2</sup>	XZ: 32,8 Mpa ZX: 28,3 MPa	XZ: 48,0 Mpa ZX: 26,0 MPa	XZ: 37,7 Mpa ZX: 21,3 MPa	XZ: 16,8 Mpa ZX: 17,4 MPa
Tensile elongation @ breaking <sup>2</sup>	XZ: 5,9% ZX: 1,8%	XZ: 2,5% ZX: 1,0%	XZ: 2,7% ZX: 1,49%	XZ: 552% ZX: 482%
Flexural strength	XZ: 61,5 Mpa ZX: 51,0 MPa	XZ: 84,0 Mpa ZX: 45,0 MPa	XZ: 69,0 Mpa ZX: 29,2 MPa	
IZOD impact test, toughness carving	XZ: 43,1 J/m ZX: 23,8 J/m	XZ: 27,0 J/m	XZ: 51,4 J/m ZX: 20,3 J/m	
Heat deflection at 1.82 MPa	97,9 °C	51,0 °C	99,0 °C	
Layer thickness	0,127mm - 0,178mm - 0,254mm - 0,330mm - 0,508mm	0,254mm	0,178mm - 0,254mm - 0,330mm	0,178mm - 0,254mm