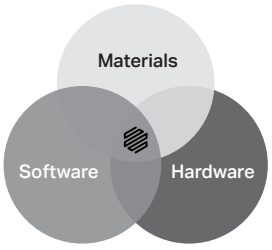
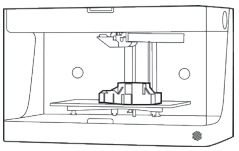
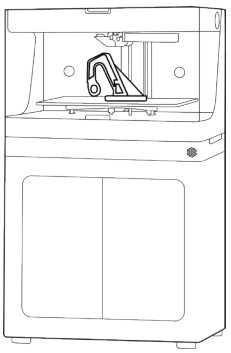
Markforged Composites Printers

Markforged

All Markforged printers are manufactured to the highest quality standards and engineered to produce the best possible parts. The printers are designed to be easy to use and fit into your existing processes. Differences between them are outlined below.







DESKTOP SERIES

INDUSTRIAL SERIES

	Onyx One	Onyx Pro	Mark Two	X3	X5	X7	
Process							Materials Variety
Fused Filament Fabrication	x	x	x	x	x	x	
Continuous Fiber Reinforcement		x	x		x	x	
Base Materials							
Nylon w. Chopped Carbon Fiber (Onyx)	x	x	x	x	x	x	
Onyx FR				x	x	x	
Nylon			x			x	
Continuous Fibers							
Continuous Fiberglass		x	x		x	x	
Continuous Carbon Fiber			x			x	
Continuous HSHT Fiberglass			x			x	
Continuous Kevlar®			x			x	
	Software						Automation + Usability
Laser Bed Leveling				x	x	x	
Laser Active Print Calibration				x	x	x	
Fiber Jam Detection		x	x		x	x	
Out-of-Fiber Detection					x	x	
Live Build Inspection **						x	
	Hardware						Part Quality
Print Head Nozzles	1	2	2 *	1	2	2 *	
Build Volume	320 x 132 x 154 mm (12.6 x 5.2 x 6.0 in)			330 x 270 x 200 mm (13.0 x 10.6 x 7.9 in)			
Bed Flatness	Flat to within 160 µm; Kinematic coupling			Flat to within 80 µm; Kinematic coupling			
Best Z Resolution	100 µm			50 µm			
Supports	Same material peel away; Turbo supports available (2x faster printing)						
Infill	Closed-cell infill; Multiple geometries available						
	Specifications						+
Storage	Cloud or Local included; On-Premise available						
Security	Two-factor authentication; Org admin access; Single sign-on						
Power	100-240 VAC, 150W (2A peak)						
Weight	16 kg (35 lb)			48 kg (106 lb)			
Footprint	584 x 330 x 355 mm (23 x 13 x 14 in)			584 x 483 x 914 mm (23 x 19 x 36 in)			

* hardened for abrasive materials, ** accuracy of Z = 1 µm, XY = 25 µm