

FX10

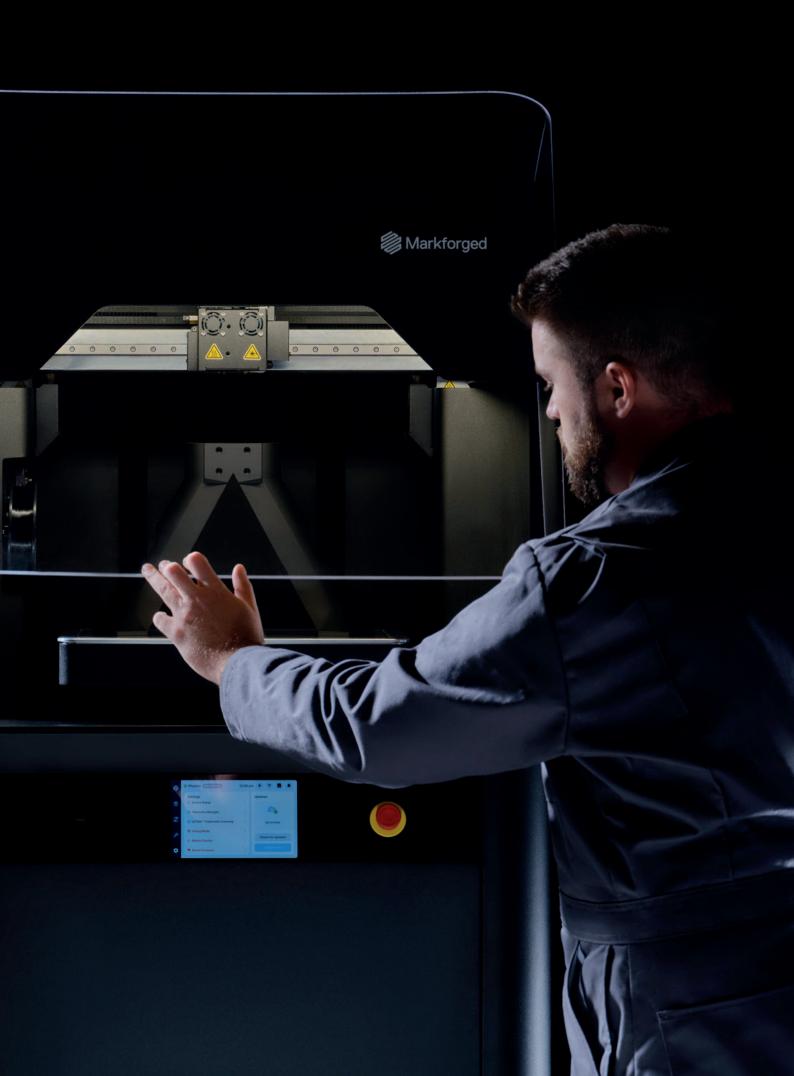
Aarkforged



The FX10 is Markforged's next-generation industrial 3D printer for composites, the result of years of engineering innovation and technological advancement. Built on the success of the Markforged X7, its goal is to make strong and accurate parts with every print. The FX10 is equipped with optical sensors mounted on the printhead that verify the dimensional accuracy of parts and evaluate the integrity and performance of the device. This printer uses automatic calibration and material changeover in a few touches that reconducts the need for dedicated operators.



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Unlock strong parts on demand

FX10 prints continuous carbon fiber reinforced parts for a wide range of factory floor applications helping manufacturers increase speed to market, slash fabrication and inventory costs, and de-risk line down events.

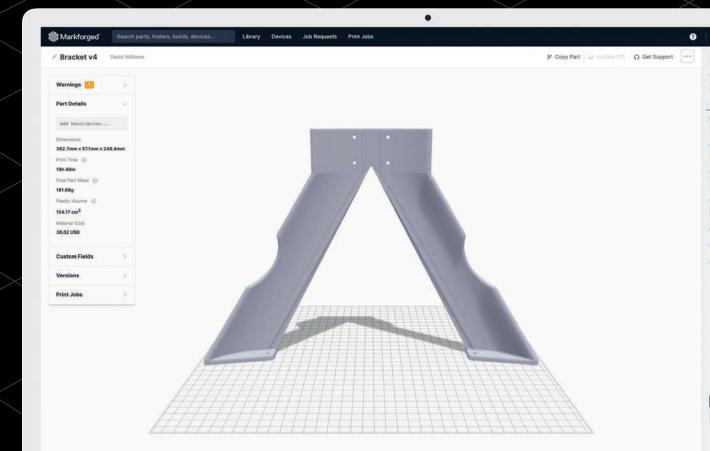
Print the right part every time

We designed every aspect of FX10 — from its motion system to the software that powers it around delivering accurate, strong parts reliably. Backed by Simulation and Inspection software, FX10 can produce verified parts that meet stringent factory floor requirements.

Drive ROI fast, then scale

FX10 operates on the Digital Forge: Markforged's additive platform that features intuitive device and desktop software, training, and built-in cost calculation. You can start generating ROI on day one and effortlessly scale to more teams, machines, and facilities.

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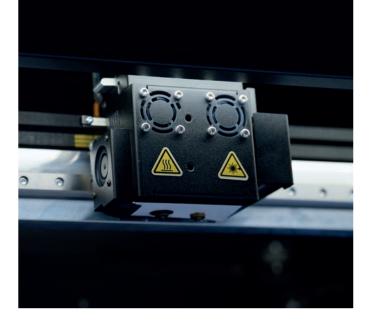




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The Digital Forge: Powered by Software

Markforged offers a simple, smart, scalable additive manufacturing platform designed to seamlessly fit into your manufacturing operation. Our software Eiger[™] was built for scale delivering a single user-experience, digital part repository and fleet management across the entire Markforged portfolio, including the FX10.





Vision Module and Laser Micrometer*

FX10 features two printhead mounted optical sensors. The laser micrometer powers Inspection — in-print dimensional validation — and machine calibration while the new Vision Module will capture detailed images of calibration parts to determine and optimize printer performance.

Heated build chamber and vacuum bed

The FX10 has a large chamber that heats to 60 °C, useful for printing high-quality parts at high speed. The aluminum vacuum bed is also heated and utiliszes precision-machine grooves that are scanned by the laser micrometer for calibration.

FX10 supercharges your manufacturing profitability and productivity by...

... slashing your part costs by up to 90% and lead times from months to days.

... boosting your production yields while decreasing operating costs.

... enabling you to replace physical inventory with digital inventory.

... keeping your production lines running with on-demand spare parts.







Large touchscreen with intuitive interface

FX10 features a 7" touchscreen. Users can start builds, monitor machine status, manually control the machine, and start automated calibration routines all in one place.

Advanced material storage with automatic changeover

An inboard material cabinet stores four spools in individually sealed compartments and supports auto material changeover and fast spool loading, reducing user intervention.





PRODUCT SPECIFICATIONS

FX10

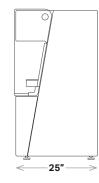
FX10 matches the part strength, surface finish, and reliability of our Industrial machines with a next-generation sensor package and flexible modular system design. Our fifth-generation extrusion system delivers precise repeatable results at twice the speed of an X7. The heated print chamber and automated spool changeover let you print large, high-quality parts, while its laser micrometer and onboard vision module capture detailed part images for precise calibration, inspection, and verification.

Printer Process Properties Build Volume	Fused Filament Fabrication, Continuous Fiber Reinforcement	
	Build Volume	375 x 300 x 300 mm (14.8 x 11.8 x 11.8 in)
	Weight	109 kg (240 lbs)
	Machine Footprint	760 x 640 x 1200 mm (30 x 25 x 46 in)
	Temperature Control	Up to 60°C steady-state
	Print System	Direct-drive print head with two nozzles (one plastic, one fiber), automatic material changeover
	Power	100-120 VAC 12A /15A 200-240 VAC 6A / 8A
	Safety	UL 2011/CSA C22.2#301 certified, CE Marked, EU Machinery Directive compliant
Materials	Plastics	Onyx®
	Continuous Fibers	Carbon Fiber
Part Properties	Layer Height	125 μm minimum, 250 μm maximum
Software Eiger™ Security	Secure digital library, powerful slicer, and printer management (premium options available at cost)	
	Security	Two-factor authentication, org admin access, single sign-on, MFP print files encrypted by default and tamper resistant
	Connectivity	Eiger connection and over-the-air updates via wi-fi and Ethernet

FRONT VIEW

46"

SIDE VIEW



* All specifications are approximate and subject to change without notice. Support for print materials and layer heights will be added over time, though not in every combination. Vision Module will not ship with the first FX10 units but will be included as an upgrade.

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