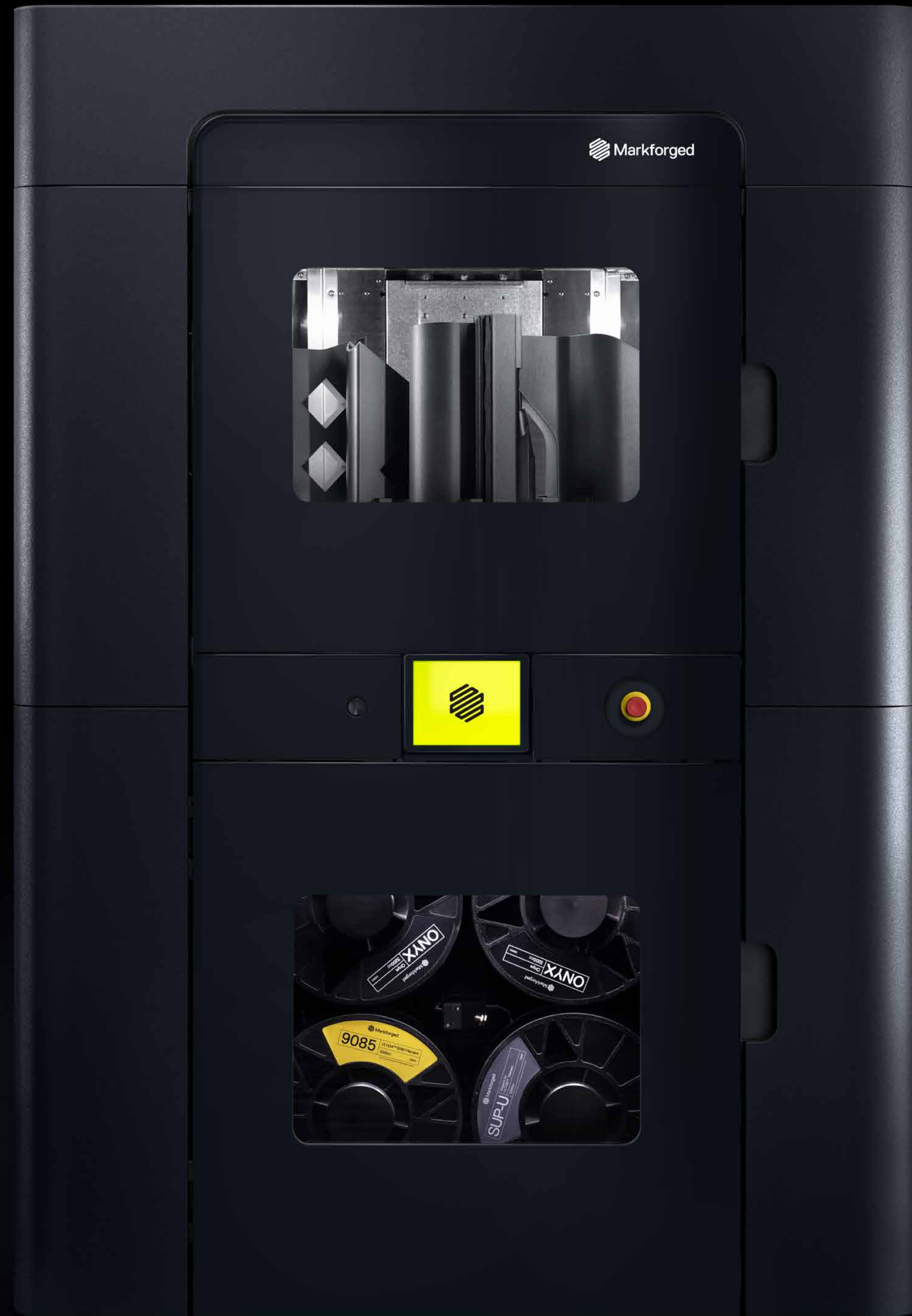




FX20™

The Digital Forge™, scaled up.





Introducing the Markforged FX20

FX20 is Markforged's new flagship 3D printer — a machine that brings The Digital Forge platform and Continuous Fiber Reinforcement (CFR) technology to a new realm of parts, problems, and industries. Designed to tackle some of the most demanding manufacturing industries — aerospace, automotive, defense. FX20 is bigger, faster, and more sophisticated than any of our other 3D printers. Whether your needs are tooling, prototypes, or production parts, FX20 is ready to push the bounds of additive manufacturing as we know it.



Massive Builds, Faster

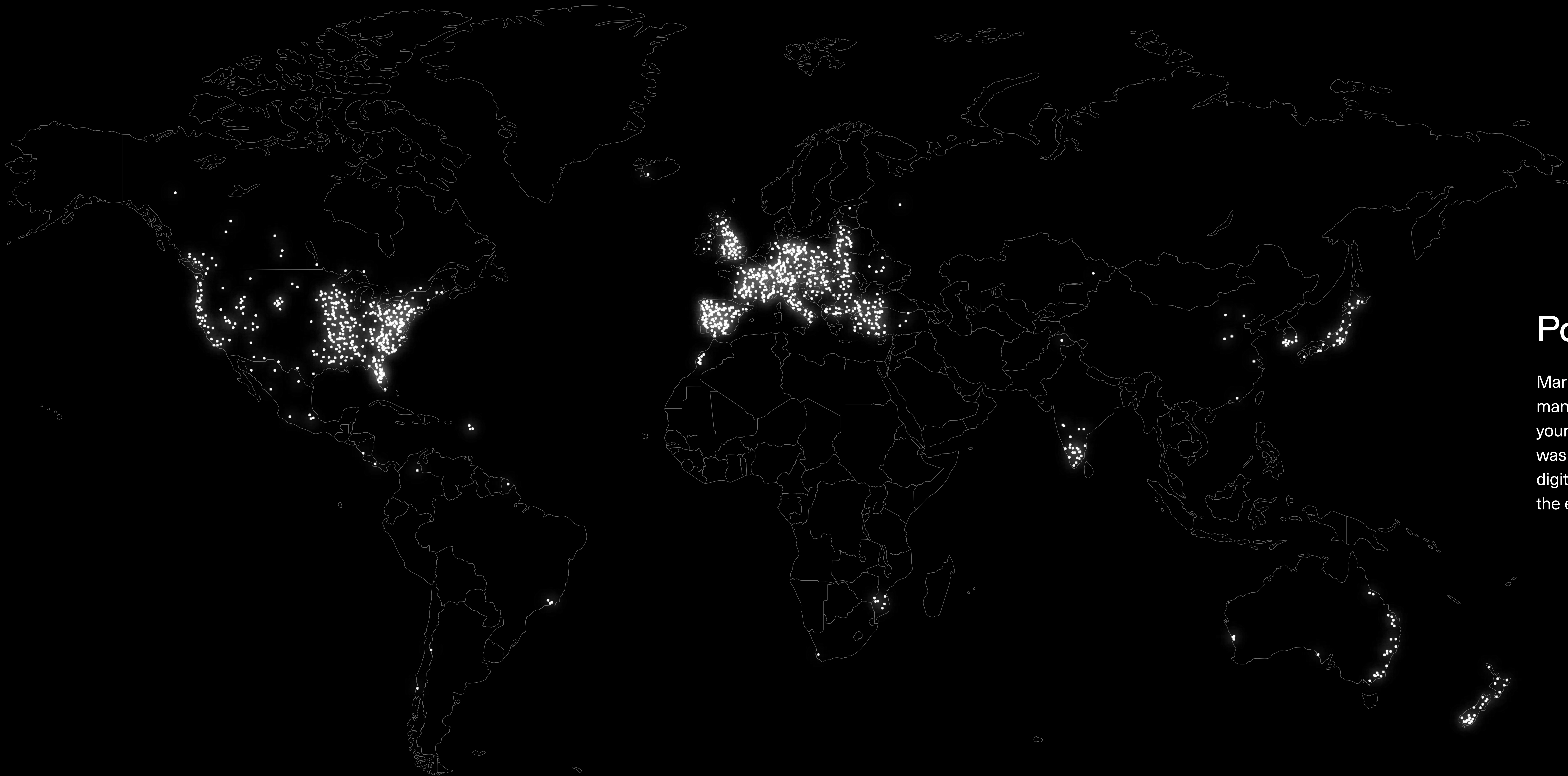
FX20 pairs size and throughput to make significantly larger parts at incredible speeds. The FX20 build chamber is nearly 5x larger than any other Markforged machine. And its completely redesigned motion and extrusion systems enable high-speed printing without sacrificing quality.

From Factory to Flight

FX20 extends the transformational benefits of The Digital Forge to new applications and industries. It was built to produce everything from performance tooling and fixtures to flight-ready production parts. For the first time, Markforged users can reinforce ULTEM™ 9085 parts with CFR technology — bringing high-strength 3D printed composites to even more demanding applications.

Production-Ready Performance

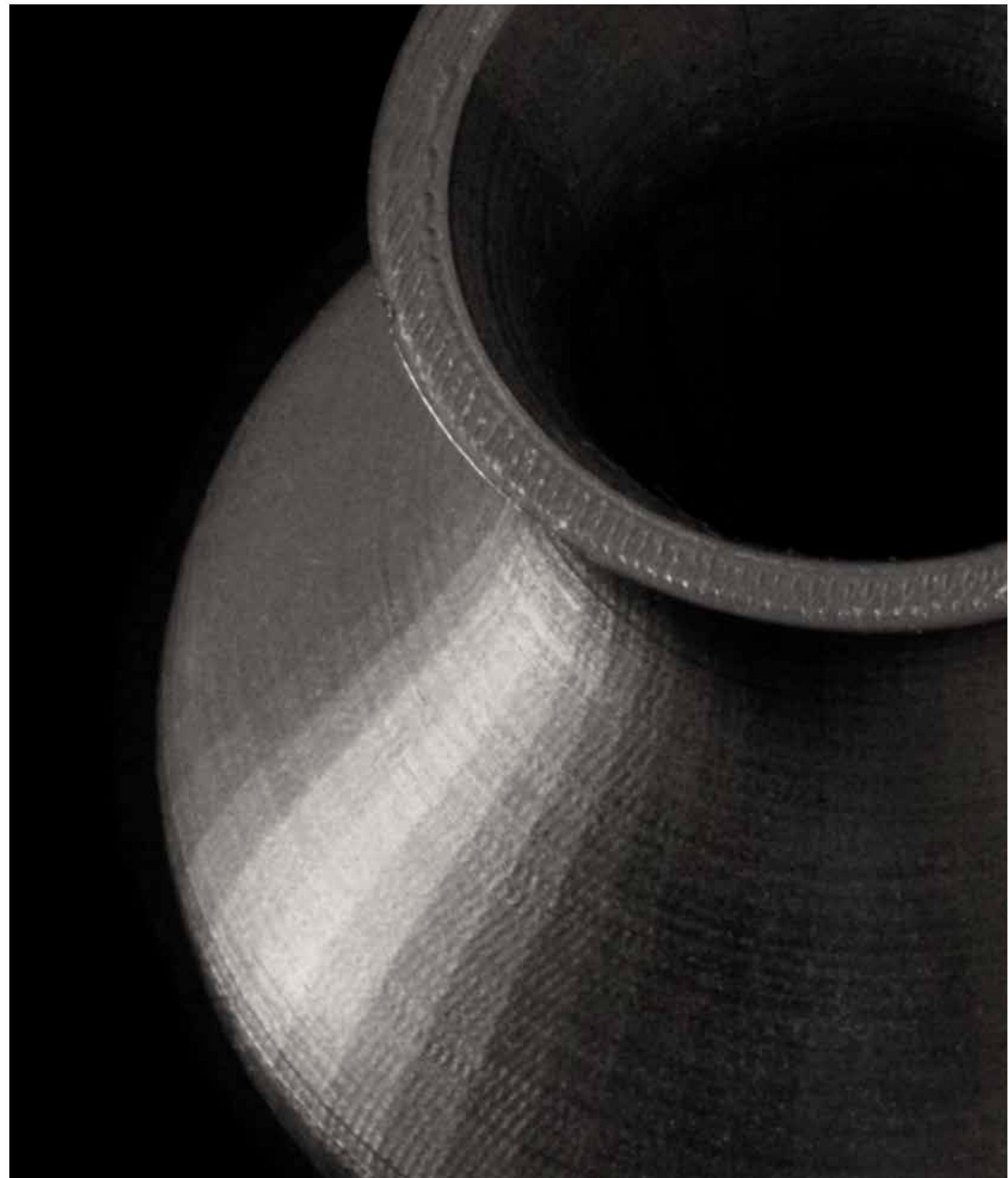
FX20 is a precise, sensor-driven machine that delivers breakthrough reliability with a simple user experience. Fully integrated storage and handling ensures materials stay dry for printing, while sensors measure each part of the extrusion system. Linear encoders on the gantry and print bed provide precise, real-time feedback on machine position resulting in highly accurate parts.



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 FX20.

FX20 Product Features



ULTEM™ 9085 capable

ULTEM™ 9085 is Markforged's first high temperature printing polymer. It's an extremely durable thermoplastic that exhibits excellent flame, smoke, and toxicity (FST) characteristics.



Large, heated build chamber

The FX20's massive heated build chamber contains a 525 mm x 400 mm x 400 mm build volume capable of printing at 200°C



Three-nozzle print heads

FX20 is capable of printing two polymers and a fiber simultaneously — enabling Support for ULTEM™ Filament material to be printed with ULTEM™ 9085 and continuous fibers.



Large touchscreen

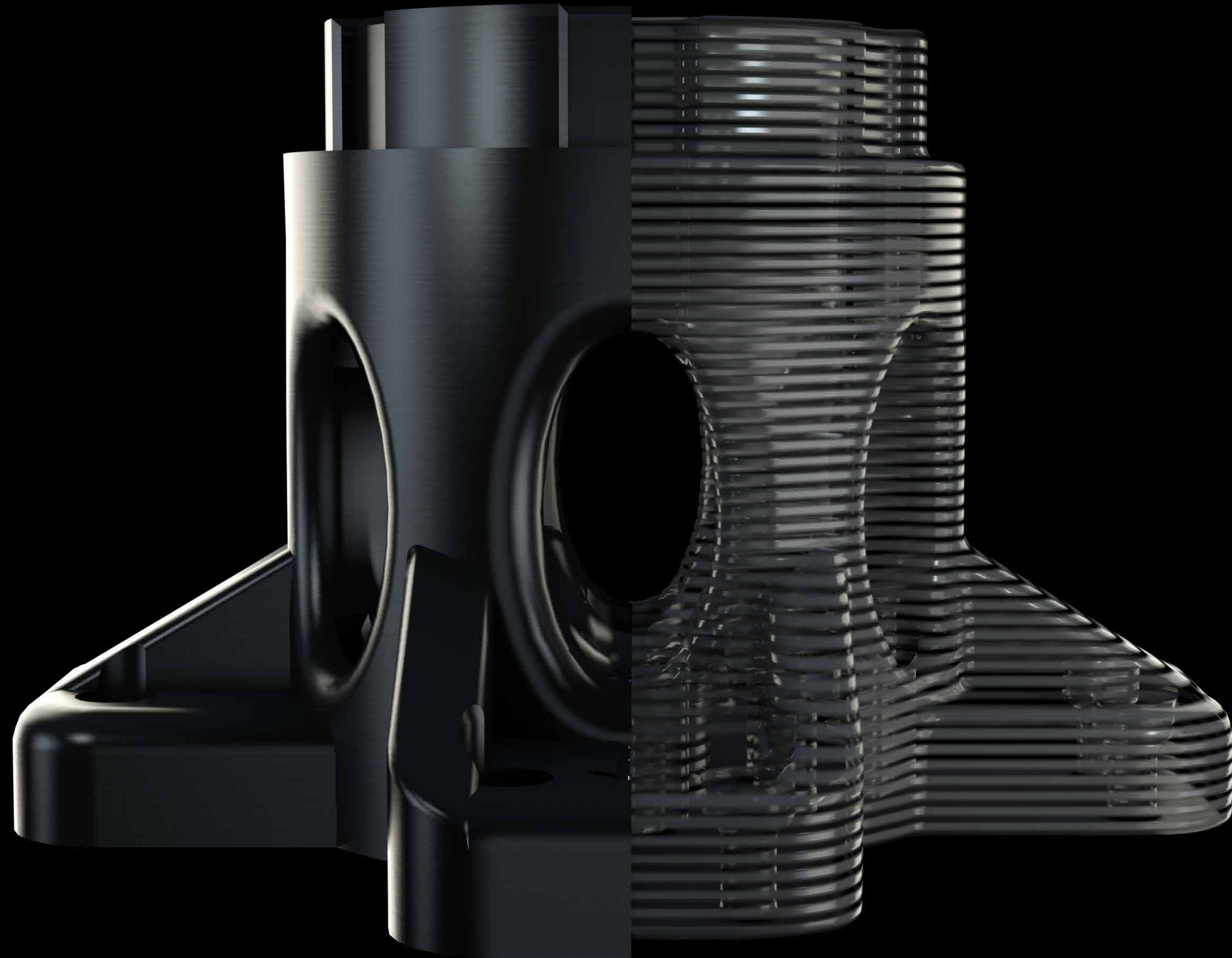
Connect to the Digital Forge platform through a 7" touchscreen. Start builds, monitor machine status, and perform maintenance all in one place.



Advanced material cabinet

An inboard material cabinet stores four XL (3200cc) spools with precise humidity controls. XL spools each contain 4x material as a standard spool.

ULTEM™ 9085



Carbon Fiber, meet ULTEM™

FX20 is Markforged's first machine capable of printing ULTEM™ 9085 — an extremely durable thermoplastic that exhibits excellent flame, smoke, and toxicity (FST) characteristics. When paired with continuous Carbon Fiber, it can be used to fabricate high-strength, aerospace-grade composite parts.



Hardware

Build Volume	525 x 400 x 400 mm (20.7 x 15.7 x 15.7 in)
Z Resolution Range	50 - 250 µm
Build Chamber	Heated up to 200° C
Materials	Plastics: ULTEM™ 9085, Onyx™, Onyx FR™, Onyx ESD™, Nylon
	Continuous Fibers: Carbon Fiber, Fiberglass, Aramid Fiber (Kevlar®), HSHF Fiberglass
Power	200-240VAC 3P+E, 24A or 347-416VAC 3P+N+E, 14A; 8 kW
Weight	453 kg (1000 lb)
Footprint	1325 x 900 x 1925 mm (52 x 36 x 76 in)

