



# Onyx

Markforged 3D printing empowers engineers to quickly 3D print strong parts in hours, freeing expensive CNC machines to focus on production parts. Onyx gives the ability to combine the strength of Markforged parts with the beauty of chopped carbon to create rigid parts that can be used in customer-facing assemblies. Onyx takes advantage of the material properties of nylon and micro-carbon reinforcement to provide dimensional stability suitable for engineering challenges and offers a smooth printing experience.

**Engineered for engineers:** With the toughness of nylon, stiffness of a fiber reinforced plastic, and a heat deflection temperature of 145°C, Onyx is perfectly suited for applications that demand a high-performance material.

**The parts you design are the parts you get:** Added micro-carbon reinforcing fiber makes for more stable parts, driving increased dimensional stability and print success rate.

**Cut post-processing out of your workflow:** Onyx delivers a stunning matte black finish perfect for end use parts, meaning your designs can be taken off the build plate and put right into action without chemical or mechanical finishing.

**The Markforged Advantage:** Onyx can be used alone, or further reinforced with embedded continuous carbon fiber, Kevlar®, or fiberglass layers — parts truly transcending the limits of conventional 3D printed plastic.

Onyx is available on our Mark Two Enterprise Kit. The Enterprise Kit includes:

- Access to new and special materials such as Onyx and High-Strength, High-Temperature Fiberglass
- Software features such as a single sign-on, two-factor authentication, and an organizational admin portal
- Early access to future features and material.



“It is safe to say  
this is the coolest  
3D printed thing  
I have ever seen.”

— Nathaniel Bogan, Inventor

© Markforged, Inc. 2016. All rights reserved.

Space Clamp CAD created by Jonathan Brazeau

Markforged's mission is to bring high strength 3D printing to everyday engineering. Offering the world's only 3D printing systems capable of automatically reinforcing engineering plastics to aluminum levels of performance and beyond, Markforged enables every business to easily manufacture parts with structural strength right on the desktop. The Mark Two Industrial Strength 3D Printer empowers professional users to affordably create workhorse 3D parts that solve real problems, as well as realize reinforced structures never before possible. Markforged technologies are delivered with thoughtful, powerful software designed for collaboration, sharing, and scaling.

For more information, visit <https://www.Markforged.com>