

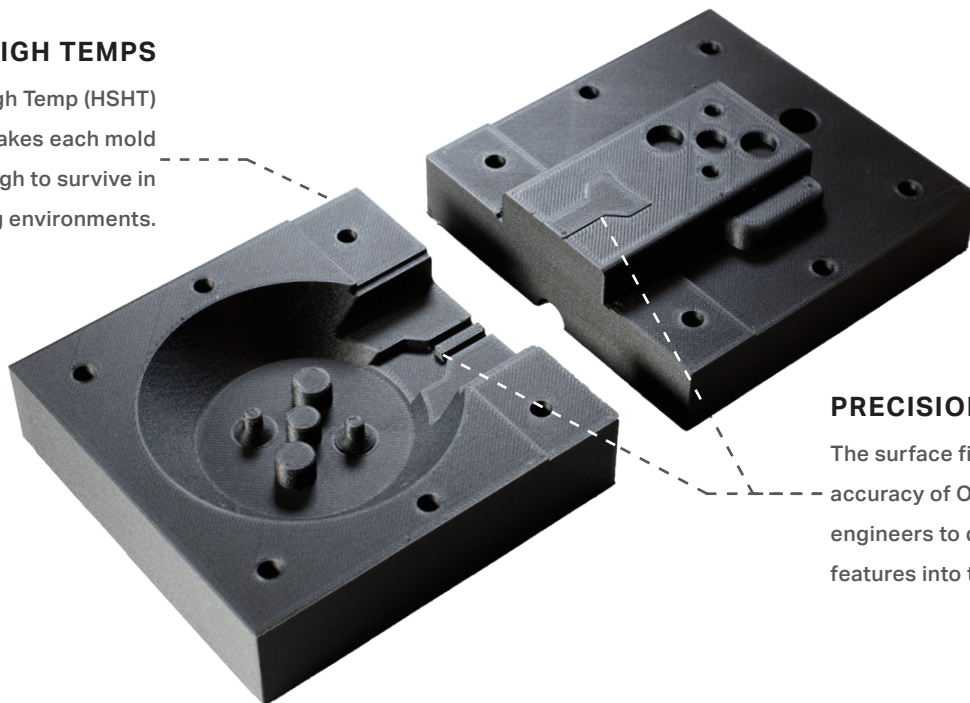
# THERMOSET MOLD

- STRENGTH AND PRECISION**— Humanetics uses a Markforged X7 to print molds for thermoset plastics.
- EXTREME ENVIRONMENT** — Each mold must withstand significant clamping force while heated to 220° F.
- FAST LEAD TIMES** — Onyx and HSHT printed molds replaced an inefficient, out-of-house silicone process.
- MASSIVE SAVINGS** — Humanetics prints molds **4x cheaper** and **2.5x faster** with Markforged technology.

## The 3D Printed Part

### ROBUST IN HIGH TEMPS

High Strength, High Temp (HSHT) fiberglass makes each mold piece robust enough to survive in thermoset molding environments.



### PRECISION PRINTING

The surface finish and dimensional accuracy of Onyx allow Humanetics engineers to design precision features into their molds.

## Next Day Molds

Molded thermoset plastics are widely used to take advantage of their strength and heat deflection temperatures. The quick turnaround time, low production cost, and long lifetime of Markforged printed molds make them an excellent fit for replacing traditional thermoset molding methods. Printed thermoset molds can withstand temperatures up to 302°F (150°C) for extended periods of time with minimal distortion.

	SILICONE MACHINED	MARKFORGED	SAVINGS
Fabrication Time	144 hrs	60 hrs	58%
Fabrication Cost	\$1,000	\$240	76%