Multi-Axis
Machining Fixture

This multi-axis workholding fixture is used to machine a metal globe with topographical features, which is adhered to the fixture with Blue Photon workholding adhesive. The fixture was 3D printed with FDM® Nylon-CF10 composite material. FDM Nylon-CF10 combines chopped carbon fiber with a nylon blend, resulting in a very strong and rigid material capable of withstanding CNC machining loads. A metal fixture designed for this task would likely require multiple parts and setups. Instead, 3D printing with soluble support material allowed single-piece fabrication, saving time and cost over a machined fixture. FDM Nylon-CF10 is available on the F190™CR and F370®CR composite printers.

System	F370®CR
Material	FDM® Nylon-CF10
Build Time	17.55 hrs
Material Used	27.51 in^3 (450.82 cm^3)
Support Material Used	4.29 in^3 (70.30 cm^3)

ISO 9001:2015 Certified

PC_web_FDM_Nylon-CF10 Work Holding Fixture 2_1023a