HP Multi Jet Fusion

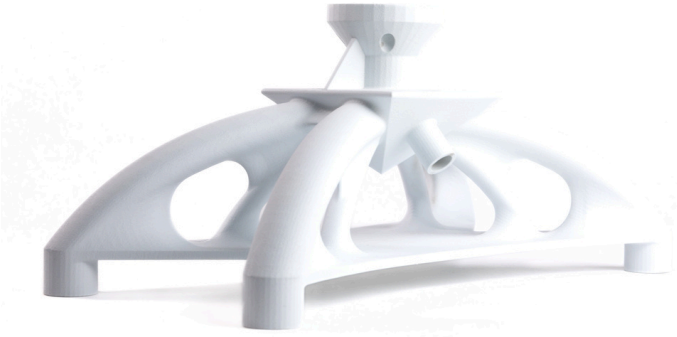
PA 12 White

Description

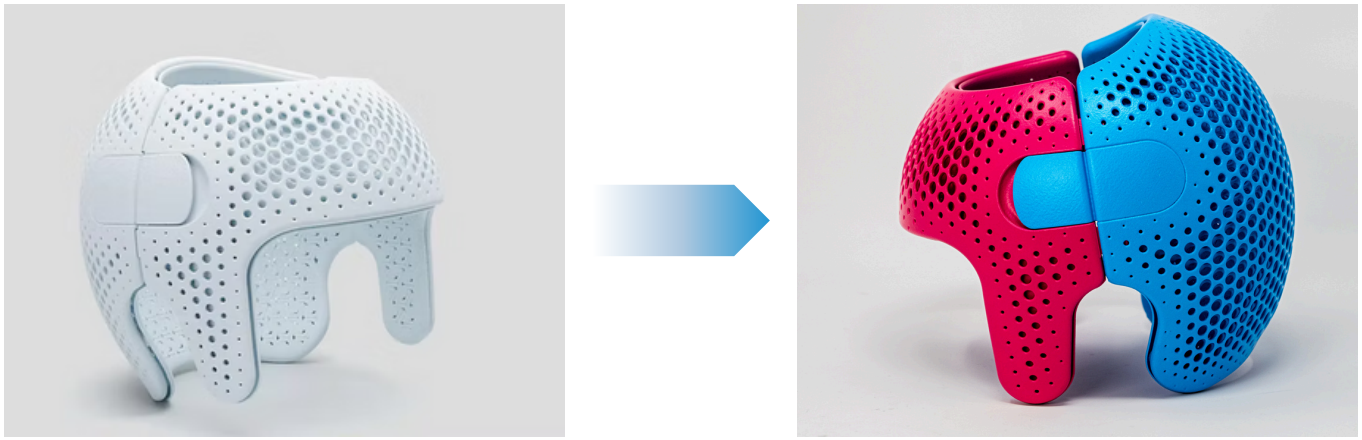
PA 12 W (White) is an engineering-grade polymer that retains the excellent mechanical properties of Nylon PA 12. The titanium dioxide in the material provides its white color, enhances dye absorption for more vibrant pigments, and improves resistance to UV radiation. This nylon-based material is perfect for producing functional prototypes, complex geometries, and customizable end-use parts. The natural white coloration of PA 12 W produced by the printer enhances the aesthetic appeal of the final product, enabling bright coloring and a premium surface finish. Its biocompatibility and low moisture absorption make it ideal for consumer goods, medical, and automotive applications.

Benefits

- Near-isotropic parts with high mechanical strength
- Deep dye absorption
- UV and water resistant
- Meets USP Class I-VI and US FDA guidance for Intact Skin Surface Devices biocompatibility
- Low moisture absorption
- Chemical resistance



DeepDye Color Transformation



Material Properties

	PA 12 White	Test Method
Description	HP 3D High Reusability PA 12 W	
Tensile Strength (MPa)	Average XY (49) Average Z (45)	ASTM D638
Tensile Modulus (MPa)	Average XY (1900) Average Z (1850)	ASTM D638
Elongation at Break (%)	Average XY (17) Average Z (9)	ASTM D638
Elongation at Yield (%)	Average XY (11) Average Z (8)	ASTM D638
Impact Strength (KJ/m2)	Average XY (4.8) Average Z (4.1)	ASTM D256
Heat Deflection Temperature	347ºF @ .45 MPa	ASTM D638
Powder Melting Point (DSC)	369°F	ASTM D3418
Particle Size (µm)	60	ASTM D3451
Density (g/cm3)	1.01	ASTM D792