Fused Deposition Modeling (FDM)

Nylon 12 / PA 12 (Industrial grade)

Key Features

Impact resistance • Fatigue resistance • Strength

Applications

Prototyping • End-use parts • Jigs and fixtures • Aerospace • Engineering

Product Description

FDM Nylon 12 merges the advantages of Nylon 12 with the design flexibility and reliability of FDM 3D printing. It enables rapid prototyping at a lower cost compared to injection molding, using the same material as production parts. Known for its strength, toughness, and excellent fatigue properties, FDM Nylon 12 is ideal for snap-fit closures, tools with press-fit inserts, and vibration-resistant parts.

Properties

Tensile modulus (XZ, ZX)	1,510, 1,250 MPa
Tensile strength (XZ, ZX)	49.3, 41.8 MPa
Elongation at break (XZ, ZX)	30, 6.5 %
Flexural strength at 5% strain (XZ, ZX)	56.5, 54.5 MPa
Flexural modulus (XZ, ZX)	1,260, 1,200 MPa
Heat deflection temperature (0.45 MPa)	94.7°C
Heat deflection temperature (1.80 MPa)	84.3°C
Density	1.01 g/cm^3

Reference

For more detailed source information, please consult the original document linked here. We encourage users to verify the data's relevance and suitability for their specific needs.