

Selective Laser Sintering (SLS) in Polyamide (PA12)

Advantages



PRECISION

We use the latest generation of SLS technologies to meet tolerances of **+/- 0.005" or +/- 0.002" per inch**, whichever is greater.



DURABILITY

Nylon is a durable material with **great impact strength, medium flexibility, and high resistance** to environmental factors.



SCALABILITY

SLS can make a single part or component as **easily as dozens of production pieces**.



COMPLEX GEOMETRY

Geometries can be built more **easily due to the 3D printing process**, adding complexity without additional cost.



RAPID TURNAROUND

Parts can typically be **shipped in 1-4 days**, allowing for faster design iterations and speed to market.



PART PRODUCTION

SLS is capable of producing **end-use parts on-demand**, increasing throughput.

NYLON 12 DuraForm® PA & ProX® PA

Biocompatible Nylon 12

Strong, tough biocompatible material that stands up to the rigours of long-term real world use, replacing traditionally injection molded articles.



Flexible / durable



High elongation



High-impact strength



Food grade



Medical grade

APPLICATIONS

Production parts

Snap fits

Automotive design

Aerospace parts and ducting

Medical / food applications

Jigs / fixtures / tools

Covers / housings / enclosures



BENEFITS

Suitable for general prototyping and end-use manufacturing



Compliant with FDA CFR 21 11 and the Plastic Directive of the European Union (EU), No 10/2011 and its amendments



Suitable for medical parts that require USP Class VI and ISO 10993 compliance or must be sterilized



Exceptional recycling rate reduces waste and decreases production costs

