

SLS Materials

Selective Laser Sintering (SLS)

We can convert your CAD files into 3D objects, dimensionally accurate very fast, using the selective laser sintering method. DuraForm EX Nylon is a rigid impact-resistant plastic that offers the toughness of an injection-molded polypropylene and ABS, yet somewhat flexible is suitable for Rapid Manufacturing.

Build prototypes that withstand aggressive functional testing, create accurate and repeatable parts as demanded by manufactures and eliminate painting by using the color Black.

Process Selective Laser Sintering / Laser Sintering

Product:	DuraForm EX Nylon – Color Black or Natural White
Tensile Strength (ASM D638):	37 MPa 5,366 PSI
Tensile Modulus (ASM D638):	1,517 MPa 220,000 PSI
Elongation @ Break % (ASTM D638):	47%
Flexural Strength (ASTM D790):	42 MPa 6,091 PSI
Flexural Modulus (ASTM D790):	1,310 MPa 190,000 PSI
Impact Strength notched (ASTM D256):	74 J/cm 1.4 ft-lb/in
Impact Strength unnotched (ASTM D256):	1,486 J/cm 27.8 ft-lb/in
Heat Deflection Temperature (ASTM D648):	@ 45 MPa 188°C @ 66 PSI 330°F @ 1.82 MPa 48°C @ 264 PSI 118°F
Applications:	Complex thin-wall ductwork, connectors, living hinges housings, impellers, snap-fit designs, unmanned air vehicles (UAV's).

Disclaimer: All tolerance specifications reflect the approximate range of a process's capabilities and should be viewed only as a guide. Actual capabilities are dependent upon manufacturing, equipment, material, and part requirements.