

MAKERBOT SPECIALTY NYLON | Data Sheet

High Abrasion-Resistance for Industrial Manufacturing Applications

MakerBot Specialty Nylon is an engineering-grade material that is optimized for high abrasion resistance due to its excellent flexural, tensile, and impact strength, not to mention a heat resistance of up to 180ºC.

MakerBot Nylon is compatible with MakerBot's water soluble PVA for unrestricted geometric freedom and is ideal for demanding applications in the automotive and industrial products industries for both functional prototypes and end use parts.

91ºC
HEAT DEFLECTION

2,200 MPA
TENSILE MODULUS

66 MPA
TENSILE STRENGTH

SUPERIOR SURFACE FINISH AND AESTHETIC APPEARANCE

MAKERBOT SPECIALTY NYLON | Data Sheet



FUNCTIONAL PROTOTYPES

Nylon is a popular material that can be mass produced for industrial applications. In anticipation of large-scale manufacturing, it can be beneficial to prototype using the same material in order to more closely mimic the final product in form, fit, and function, but also in testing.

Applications include:

- Industrial products
- Seat Belt buckles
- Gaskets
- Manifolds

END-USE PARTS

In a shop or on a factory floor, nylon parts are used for augmented or original tools, jigs & fixtures, and replacement parts such as gears. Nylon's ruggedness makes it an ideal material for these end use applications.

Applications include:

- Gears
- Pulleys
- Nuts and Bolts
- Assembly Fixtures

TECH SPECS	Imperial	Metric
Heat Deflection (ASTM 648, 66 psi)	196ºF	91ºC
Flexural Strength (ASTM D790, 15 mm/min)	14,000 psi	97 MPa
Flexural Modulus (ASTM D790, 15 mm/min)	250,000 psi	1,700 MPa
Tensile Strength at yield (ASTM D638, 50 mm/min)	9500 psi	66 MPa
Tensile Modulus (ASTM D638, 50 mm/min)	320,000 psi	2,200 MPa
Strain at Yield - Elongation (%)	>10%	>10%
Notched Impact Strength (ASTM D256)	3.5 ft-lb/in	187 J/m

METHOD

A MANUFACTURING WORKSTATION.

Print real ABS with 100 C Heated Chamber.

Powered by: stratasys

MakerBot METHOD bridges the gap between industrial and desktop 3D printing. It was developed from the ground up leveraging industry-leading Stratasys® patents including a heated build chamber, precision dissolvable supports, and dry-sealed material bays. Engineers and designers use METHOD to create prototypes, jigs and fixtures, and end-use parts.

LEARN MORE AT MAKERBOT.COM/METHOD