

Fabrica Materials



Contact Us

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Fabrica Materials enable manufacturers to get true plastic and composite material properties with the highest precision in the market.

The wide range of materials displays a variety of mechanical properties, varying degrees of thermal resistance and specialized properties such as transparency and biocompatibility. Each material series brings unique advantages, giving you the flexibility to select the material best suited for your micro-manufacturing needs.



PRECISION

for strength and flexibility

PERFORMANCE

for high thermal resistance

DURABLE

for serial production of demanding applications

TRANSPARENT

for translucent applications

MEDICAL

for applications that require bio-compatibility

Precision



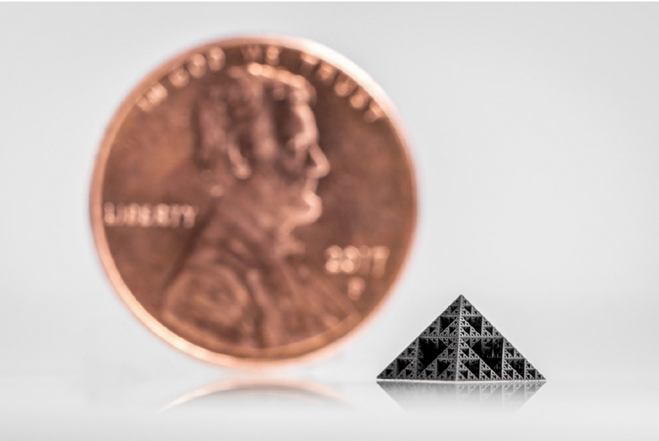
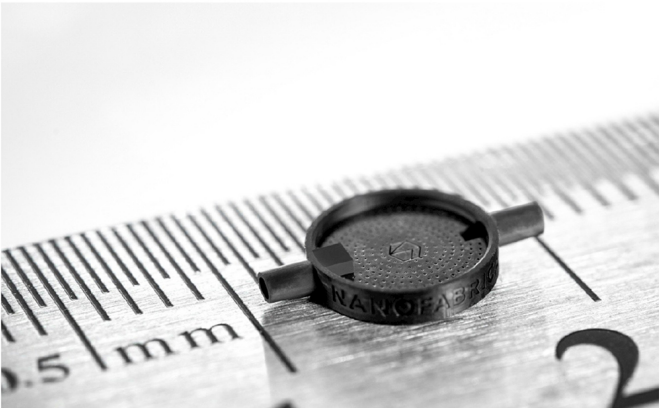
The **N-800** from the **Precision series** is an ABS-like material that provides a unique combination of strength and flexibility.

Widely used in countless engineering applications, it is the ideal choice for structural applications.

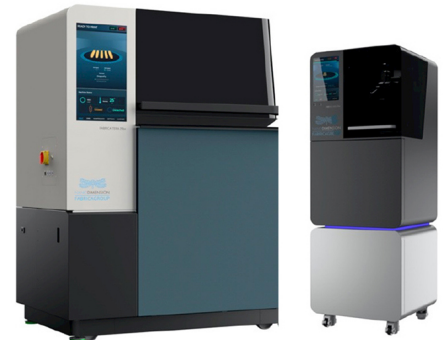


N-800

Tensile Strength (MPa)	60
Young's Modulus (MPa)	580
Elongation at break (%)	12
Flexural Strength (MPa)	73
Flexural Modulus (MPa)	1300
Flexural max strain (%)	5.2
Shore Hardness (scale D)	86
Tg (°C)	100
Df (@10Mhz)	0.016
Dk (@10Mhz)	1.76
Density (g/cm³)	1.15
Resolution (µm)	2

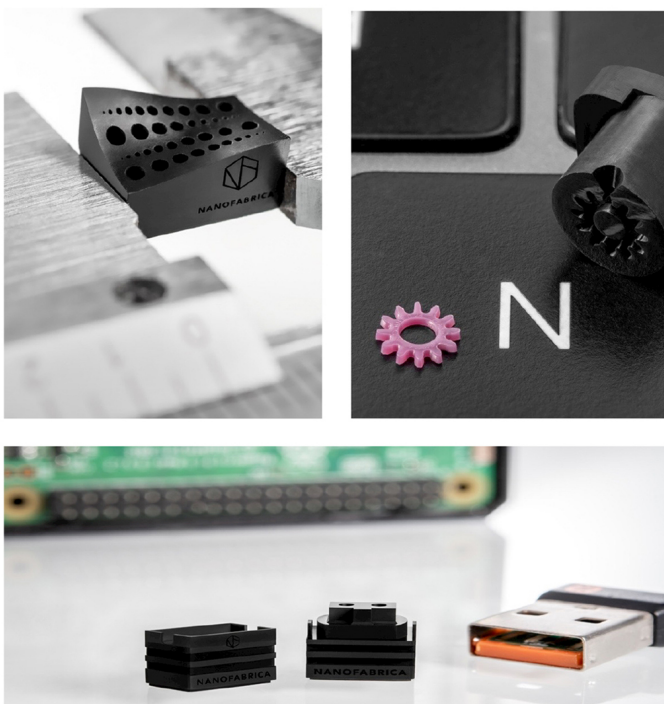


Performance



The **Performance series** is designed to withstand high temperatures, perfect for miniaturized parts in high performance applications such as electronics or injection molding.

P-900 is a high-resolution, composite ceramic loaded, material with upgraded mechanical properties that offers high-wear resistance for demanding applications.



Coming in 2023: The **P-910** will have an increased glass transition temperature of over 180°C and a heat deflection temperature of over 200°C, for extreme thermal performance. Ideal for prototyping and manufacturing precision parts that require high heat resistance, such as injection molding.



P-900

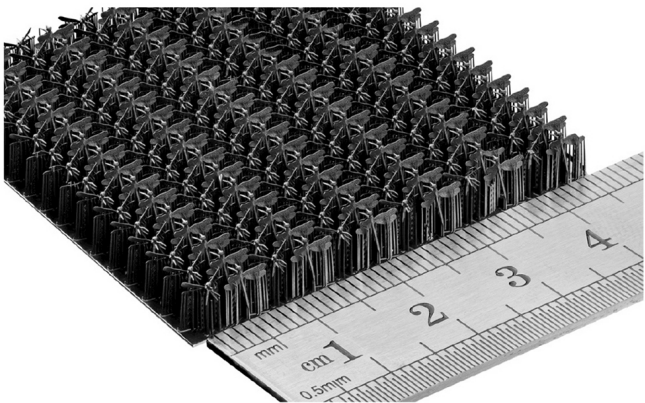
Tensile Strength (MPa)	60
Young's Modulus (MPa)	660
Elongation at break (%)	11
Flexural Strength (MPa)	98
Flexural Modulus (MPa)	2000
Flexural max strain (%)	7.6
Shore Hardness (scale D)	90
Tg (°C)	140
Df (@10Ghz)	0.017
Dk (@10Ghz)	2.14
Density (g/cm ³)	1.27
Resolution (µm)	2

Durable



The **Durable series** of materials boasts versatile mechanical properties offering both rigid and semi-rigid options for demanding applications. These materials are ideal for serial production, such as consumer smart devices.

The **D-810** is a durable, versatile ABS-like material that enables high structural integrity with high-yield and cost-efficiency



Coming in 2023: The **D-820** is a PVC-like material. Components produced with this material have a high endurance over repeated use where flexibility is required, for example, in complex assemblies or parts that cannot be produced by a mold.



D-810

Tensile Strength (MPa)	50
Young's Modulus (MPa)	550
Elongation at break (%)	11
Flexural Strength (MPa)	80
Flexural Modulus (MPa)	1600
Flexural max strain (%)	6.0
Shore Hardness (scale D)	88
Tg (°C)	120
Df (@10Ghz)	0.015
Dk (@10Ghz)	2.65
Density (g/cm³)	1.15
Resolution (µm)	2

Transparent



The **Transparent series** are PMMA-like (polymethyl methacrylate) materials that are perfectly suited for production of parts that require varying levels of translucency such as optical elements, microfluidic chips and medical devices.

The **T-700** is a durable, rigid material that enables high structural integrity with high accuracy.



Coming in 2023:

The **T-710** is an advanced PMMA-like material that is rigid, with 50% transmittance, and can be produced with a high level of accuracy.



T-700

Tensile Strength (MPa)	38
Young's Modulus (MPa)	460
Elongation at break (%)	12
Flexural Strength (MPa)	73
Flexural Modulus (MPa)	1350
Flexural max strain (%)	6.5
Shore Hardness (scale D)	84
Tg (°C)	100
Density (g/cm³)	1.15
Resolution (µm)	5

Medical



The **Medical series** of materials have been specifically designed for use in applications that require bio-compatibility.

The **M-810** is a non-cytotoxic material, tested and approved for skin contact according to tests based on ISO-10993 and USP CLASSVI.

This material is suitable for tiny and precise medical device components such cannula, medical diagnostics, imaging and manifolds.

The **M-810** is scheduled for release by the end of 2023.



M-810



Anything's possible if you've got a Fabrica!

Precision parts are a huge deal across multiple industries.

The Fabrica micro-manufacturing hub is designed to free innovation from the constraints of traditional manufacturing.

With its incredibly high resolution and repeatable micro-level accuracy and precision, Fabrica transforms micro-additive manufacturing and empowers you to unleash innovation.



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