

Duraform[®] ProX[™] Plastic

preliminary

Strong, tough plastic that stands up to the rigors of long-term real world use replacing traditionally injection molded articles. Engineered for the ProX 500 SLS[®] 3D printer, with exceptional recyclability and unparalleled mechanical properties.



Applications

- Functional prototyping and low volume production parts for
 - Automotive
 - Aerospace
 - Consumer goods
- Housings and enclosures
- Snapfits and complex assemblies
- Connectors

Benefits

- ProX 500 SLS system and DuraForm ProX were developed in conjunction to take SLS to a new level of performance and cost effectiveness
- Replace articles that are typically CNC machined or injection molded with this tough plastic
- Exceptional recycling rate reduces waste and decreases production costs
- Expanded utilization of parts

To order DuraForm ProX, please request 24159-902 (7.5kg bottle).

Features

- Excellent mechanical properties
- Outstanding surface smoothness
- Exceptional recyclability
- Very high part density



3DSYSTEMS[®]

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Duraform[®] ProX[™] Plastic

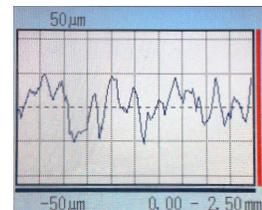
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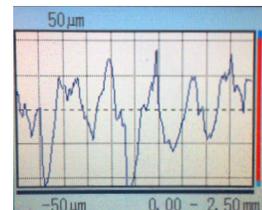
Technical Data

General Properties			
Measurement	Condition	Metric	U.S.
Sintered Part Density (g/cm ³)		.97	.97
Mechanical Properties			
Measurement	Condition	Metric	U.S.
Tensile Strength (MPa/PSI)	ASTM D 638	47-51	6815-7395
Tensile Modulus (MPa/KSI)	ASTM D 638	1740-1905	252-276
Elongation at Break	ASTM D 638	13-15 %	13-15 %
Flexural Strength (MPa/PSI)	ASTM D 790	63-65	9135-9425
Flexural Modulus(MPa/KSI)	ASTM D 790	1595-1690	231-245
Notched Izod Impact Strength (J/m /Ft-lbs/in)	ASTM D 256	33-42	0.62-0.78
Hardness, Shore D	ASTM D2240	73	73

Unprecedented Surface Quality in SLS



Surface roughness of DuraForm ProX on a ProX 500: Ra=9.7



Surface roughness of typical SLS parts: Ra=17.8



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