

3D Systems LaserForm™ A6 Tool Steel Powder for Rapid Tooling and Rapid Manufacturing

Category : Metal , Ferrous Metal , Tool Steel , Air-Hardening Steel , Cold Work Steel

Material Notes:

Parts fabricated from this rapid prototype metal material are actually a blend of stainless steel and bronze. The part is built with steel and subsequently infiltrated with bronze. A6 is great for producing rapid tooling inserts quickly and inexpensively. Specific applications include complex tooling inserts for injection molding and die casting, small/complex metal parts, and short run manufacturing. Tolerances may be a problem so post-machining may be needed. If this is the case then machining stock should be added the CAD drawings. For use with Sinterstation® HiQ™ series and other SLS® systems. Applications: Complex tooling inserts for injection molding and die-casting, Conformal cooling or heating channels integrated into tool designs, Smaller and complex geometry metal parts, Low volume metal part manufacturing. Property data is for sintered and infiltrated parts. Information provided by Axis Prototypes.

Order this product through the following link:

http://www.lookpolymers.com/polymer_3D-Systems-LaserForm-A6-Tool-Steel-Powder-for-Rapid-Tooling-and-Rapid-Manufacturing.php

Physical Properties	Metric	English	Comments
Density	7.80 g/cc	0.282 lb/in ³	ASTM D792

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	10 - 20	10 - 20	as-infiltrated; polished surface; ASTM E18
	39	39	heat treated; ASTM E18
Tensile Strength at Break	610 MPa	88500 psi	ASTM E8
Tensile Strength, Yield	470 MPa	68200 psi	0.2% offset; ASTM E8
Elongation at Break	2.0 - 4.0 %	2.0 - 4.0 %	ASTM E8
Tensile Modulus	138 GPa	20000 ksi	ASTM E8
Compressive Yield Strength	480 MPa	69600 psi	ASTM E8

Thermal Properties	Metric	English	Comments
CTE, linear	7.45 μm/m-°C	4.14 μin/in-°F	ASTM E831
Thermal Conductivity	39.0 W/m-K	271 BTU-in/hr-ft ² -°F	ASTM E457
	@Temperature 215 °C	@Temperature 419 °F	

Descriptive Properties	Value	Comments
Color	Light Bronze	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China