LASER SINTERING MATERIAL SPECIFICATIONS





PA 950 HD

NYLON 12

The material has exceptionally high reusability to increase production efficiency. Parts produced from PA 950 HD exhibit superior stability and surface finish.

HIGHLIGHTS

- → Improved surface finish & definition
- → Uniform black pigmentation
- → Stabilized polymer for consistent reusability
- → Maximized material efficiency with near zero waste

APPLICATIONS

- → Ideal for applications requiring mechanical stress resistance and a balance of strength and flexibility
- → Suitable for a variety of industries, including automotive and consumer goods



HEADQUARTERS

ALM - Advanced Laser Materials

3115 Lucius McCelvey, Temple, TX 76504 P: 1.254.773.3080 FAX: 1.254.773.3084 E: info@advancedlasermaterials.com

AdvancedLaserMaterials.com

PA 950 HD



NYLON 12

The material has exceptionally high reusability to increase production efficiency. Parts produced from PA 950 HD exhibit superior stability and surface finish.

| TYPICAL PHYSICAL PROPERTIES | | | |
|-----------------------------|-------------|---------------------------|------------------------|
| PROPERTY | TEST METHOD | IMPERIAL | METRIC |
| Color/Appearance | Visual | Black | Black |
| Bulk Density | ISO 60 | 0.277 oz/in ³ | 0.48 g/cm ³ |
| Tensile Modulus XY | ASTM D638 | 242,200 psi | 1670 MPa |
| Tensile Modulus Z | ASTM D638 | 253,800 psi | 1750 MPa |
| Tensile Strength XY | ASTM D638 | 6,380 psi | 44 MPa |
| Tensile Strength Z | ASTM D638 | 5,940 psi | 41 MPa |
| Elongation at Break XY | ASTM D638 | 13.1 % | 13.1 % |
| Elongation at Break Z | ASTM D638 | 6.1 % | 6.1 % |
| Hardness (Shore D) | ISO 868 | 81 | 81 |
| Flexural Strength XY | ASTM D790 | 9,715 psi | 67 MPa |
| Flexural Strength Z | ASTM D790 | 9,425 psi | 65 MPa |
| Flexural Modulus XY | ASTM D790 | 249,460 psi | 1720 MPa |
| Flexural Modulus Z | ASTM D790 | 248,010 psi | 1710 MPa |
| HDT 0.45 Mpa XY | ASTM D648 | 327 F | 164 °C |
| HDT 0.45 Mpa Z | ASTM D648 | 332 F | 167 °C |
| HDT 1.82 Mpa XY | ASTM D648 | 185 F | 85 °C |
| HDT 1.82 Mpa Z | ASTM D648 | 186 F | 86 °C |
| Sintered Part Density | ASTM D792 | 0.0357 lb/in ³ | 0.99 g/cc |

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change without notice.