

Our Viper si2 SLA system builds parts with a smooth surface finish, high accuracy and excellent fine feature detail that require minimal finishing. It's ideal for a myriad of solid imaging applications, from rapid modeling and prototyping, to patterns for investment casting.

## MACHINE

- Beam (diameter @ 1/e2) Standard mode: 0.250 +/- 0.025 mm
- Beam (diameter @ 1/e2) Hi res mode: 0.075 +/- 0.015 mm
- Minimum layer thickness Standard mode: 0.1mm
- Minimum layer thickness Hi res mode: 0.05mm
- Maximum build envelope in standard mode: 250 x 250 x 250 mm XYZ
- Maximum build envelope in HR mode: 125 x 125 x 250 mm XYZ

## MATERIAL

Accura 60 resin is a polycarbonate simulation plastic capable of building tough, functional prototypes. These can be built for a variety of applications including automotive parts, medical instruments, consumer electronics and master patterns for castings. The parts made can also be used to visualise internal features and components due to its translucent finish. The finished SLAs offer durability, stiffness, and a high humidity resistance making them incredibly versatile.

## PROPERTIES

MEASUREMENT	CONDITION	VALUE
Solid Density	@ 25°C (77°F)	1.21 g/cm <sup>3</sup>
Tensile Strength	ASTM D 638	58 - 68 MPa (8410 - 9860 PSI)
Tensile Modulus	ASTM D 638	2690 - 3100 MPa (390 - 450 KSI)
Elongation at Break (%)	ASTM D 638	5 - 13 %
Flexural Strength	ASTM D 790	87 - 101 MPa (12620 - 14650 PSI)
Flexural Modulus	ASTM D 790	2700 - 3000 MPa (392 - 435 KSI)
Impact Strength (Notched Izod)	ASTM D 256	15 - 25 J/m (0.3 - 0.5 ft- lb/in)
Heat Deflection Temperature	ASTM D 648 @ 66 PSI	53 - 55 °C (127 - 131 °F)
	ASTM D 648 @ 264 PSI	48 - 50 °C (118 - 122 °F)
Hardness, Shore D		86
Co-efficient of Thermal Expansion	ASTM E 831-93 TMA (T<T <sub>g</sub> , 0 - 40 °C)	71 µm/m-°C
	ASTM E 831-93 TMA (T<T <sub>g</sub> , 75 - 140 °C)	153 µm/m-°C
Glass Transition (T <sub>g</sub> )	DMA, E"	58 °C (136 °F)