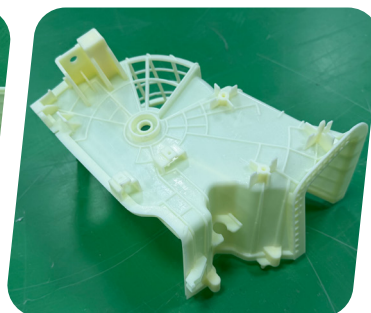
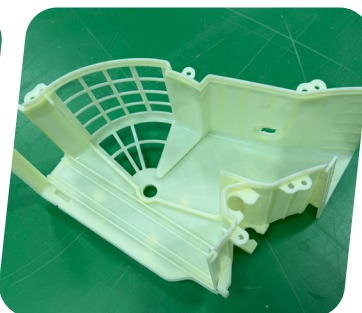
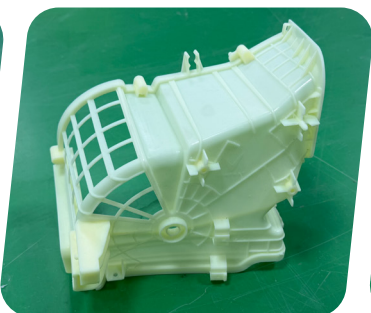
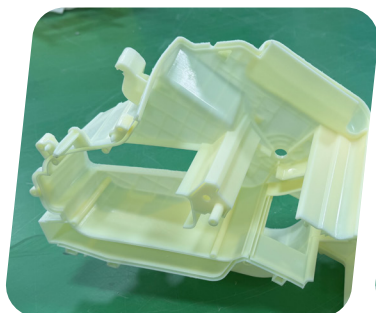
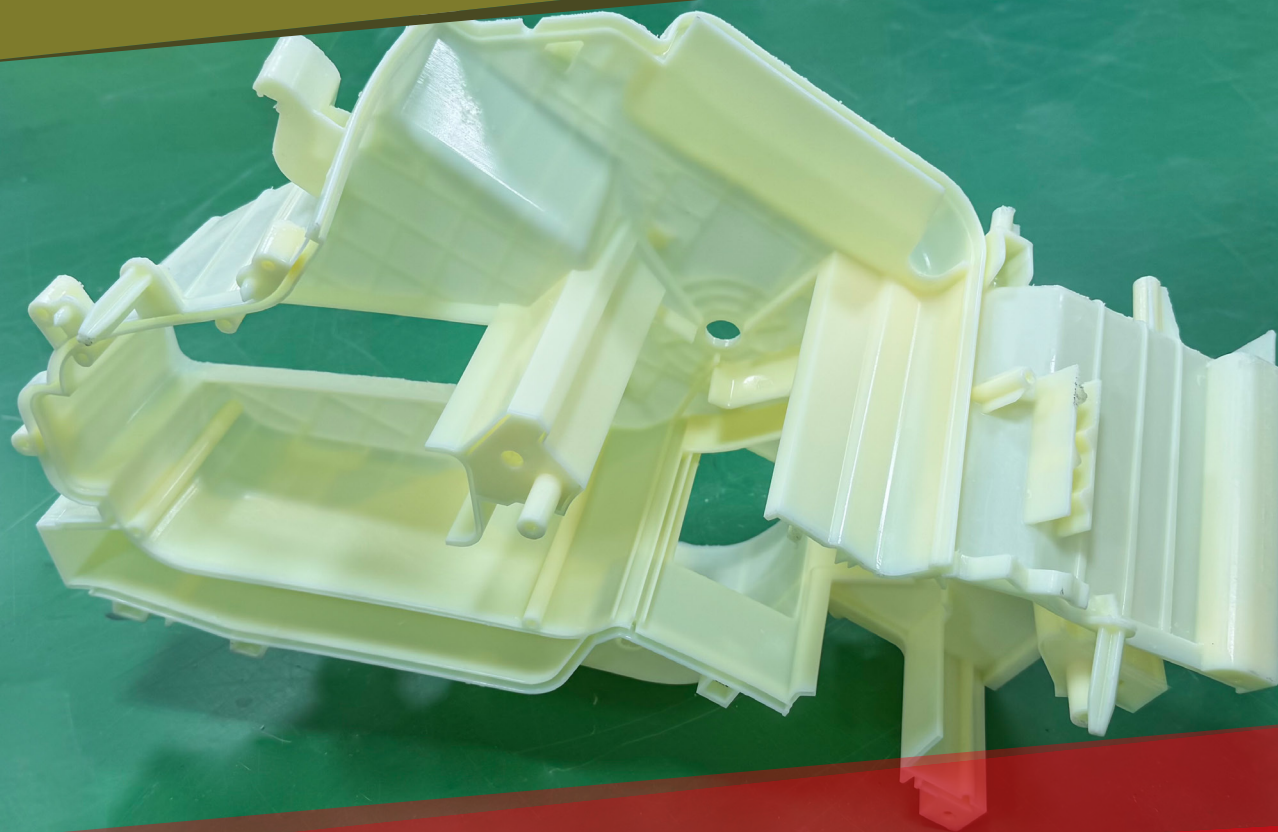


TECHNICAL DATA

KS50TGH

Product Demonstration



Shenzhen Kings 3D Co., Ltd

Building B, No. 148 Huanli Road, Yungu Community, Xinhua Street,
Guangming District, Shenzhen, China.



Kings
3D Printing

Material Overview

KS50TGH is a high-toughness resin engineered for applications requiring excellent impact resistance, low shrinkage, and reliable mechanical performance. With a balanced combination of toughness, strength, dimensional stability, and surface quality, KS50TGH is ideal for precision prototypes, complex structural parts, assembly testing, and functional components.

Features

- High toughness and excellent impact resistance
- Low shrinkage for improved dimensional accuracy
- Smooth surface finish and excellent detail reproduction
- Good tensile and flexural strength
- Balanced toughness and mechanical performance
- Suitable for complex structures and functional parts

Advantages

- **Toughness** — Excellent impact resistance
- **Accuracy** — Low shrinkage and dimensional stability
- **Durability** — Reliable mechanical performance
- **Smoothness** — Excellent surface finish
- **Versatility** — Suitable for complex functional parts

Ideal Applications

Precision Prototypes, Appearance Verification Models, Complex Structural Parts, Assembly Testing Parts, Automotive Interior Components, Consumer Electronics Components, Functional Prototypes, Product Development & Design Verification.

Technical Datasheet

Physical Properties

Appearance	Yellow-Green
Density	1.11–1.14g/cm ³ @ 25°C
Viscosity	480–530

Optical Properties

Dp	0.135–0.155 mm
Ec	9–12 mJ/cm ²
Building layer thickness	0.05–0.15mm

Mechanical Properties

Measurement	Test method	Value
Hardness, Shore D	ASTMD240	75–78
Flexural Strength, MPa	ASTM D 790	60–75
Tensile Strength, MPa	ASTM D638	35–40
Elongation at Break, %	ASTM D638	19–22%
Impact Strength, J/m	ASTM D 256	58–70
Tensile Modulus, MPa	ASTM D638	2,150–2,370
Heat Deflection Temperature, °C	ASTM D648	48–50

Recommended temperature for processing and storage of the above resin should be 18°C–25°C.

The above data are based on our current knowledge and experience, the values of which may vary and depend on individual machine processing and post-curing practices. The safety data given in above is for information purposes only and does not constitute a legally binding MSDS. The relevant MSDS can be obtained upon request from your supplier or you may contact Kings 3D directly at "market@kings3dprinter.com"