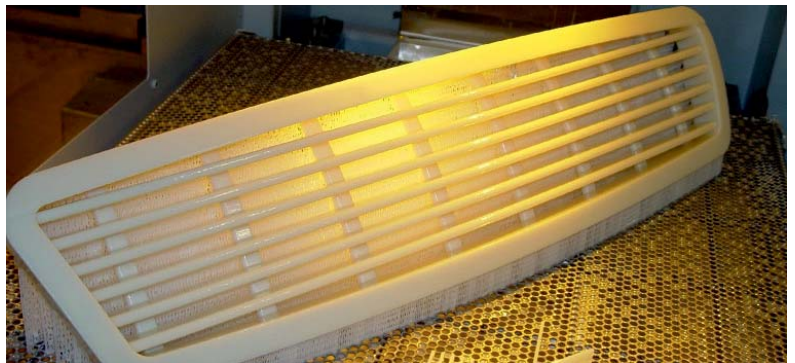


Stereolithography (SLA)

With stereolithography, components made of UV reactive plastics, so-called photopolymers, are built up in layers through energy input via laser beam. The advantages of stereolithography over other light-curing methods are in the laser as the energy source. Through the precisely focussed beam diameter with high energy density and sophisticated scanning strategies, stereolithography still sets the standard for all generative procedures in terms of accuracy and edge sharpness. This makes SLA models outstanding master models for duplication processes such as e.g. vacuum casting, but naturally also for requirements with the highest precision and surface quality demands such as e.g. translucent prototypes for flow investigations.

Advantages

- Best accuracy of all 3D printing methods
- Best edge sharpness of all 3D printing methods
- Very good finishing options
- Efficient even for large components



Radiator grille in SLA 7000

Options



SLA models concept car headlights

- Installation space 508x508x400mm
- Standard material Accura SI60
- Prototypes and master models
- Finishing options grinding, painting, water transfer coating, etc.

4D CONCEPTS

Application example concept car

The headlights, door handles and side mirrors for a presentation-ready concept car were realised with stereolithography because the components had to have perfect surfaces and sharp edges with a chrome look. The chrome look was created after the appropriate fine finishing of the SLA models with a chrome effect paint.



Headlights with chrome effect paint

Application example surface finishing

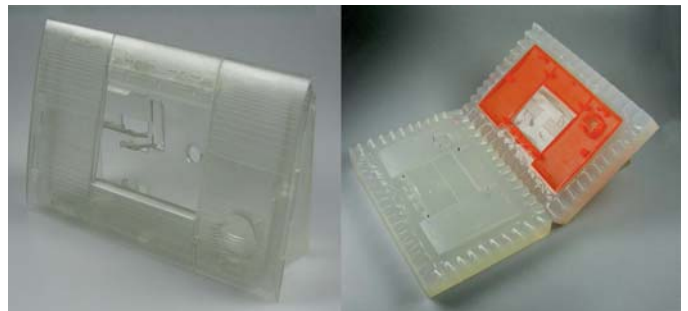


SLA model with root wood look via water transfer printing

The very good workability of SLA models makes it perfectly suited for the finishing of component surfaces with methods such as various effect paints or also water transfer printing. The basis of a visually perfect surface is of course a perfect model surface. SLA models already have a good surface directly from the process and can be reworked all the way to polished surfaces with relatively little effort.

Application example master patterns for duplication

With master models for duplication processes, the best possible accuracy and surface quality of the master model is crucial for the quality of the cast parts. We therefore use the most precise 3D printing methods for the production of silicone moulds for vacuum casting - stereolithography. Another advantage of stereolithography over photopolymer printing methods such as PJ is the considerably faster production speed and more affordable cost structure, especially with large components



SLA master model
alarm centre

silicone mould with cast lid