WHAT IS

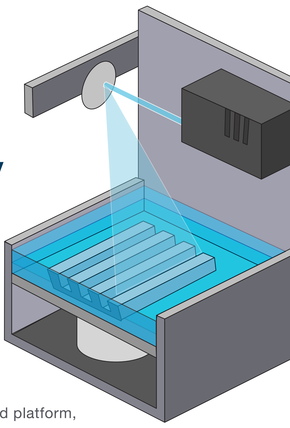
Stereolithography?

Stereolithography (SLA®/SL) is often used for prototypes, large concept models, form and fit models and investment casting patterns.

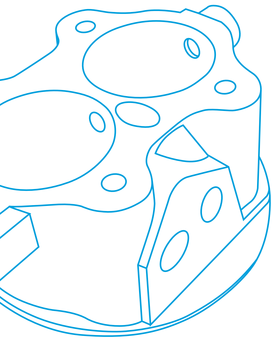
66%
cost savings
Archie Held saw significant cost savings by replacing hard tooling with SL investment casting patterns when creating the PAC 12 championship football trophy.

1st
AM technology
SL is the original 3D printing process widely used today for its accuracy & speed.

How Stereolithography works



- CAD data is uploaded to the machine
- A precise UV laser to cures liquid photopolymer layer by layer
- After each layer, the build platform lowers and process repeats
- Completed parts are removed from build platform, supports are removed and the part is given a final UV cure



Investment casting patterns

Stratasys Direct's proprietary SL photopolymer and build style produce consistent patterns with great burnout and low residual ash.

- Large, accurate parts
- Higher yields at a lower cost
- Excellent humidity/moisture resistance

Benefits of Stereolithography

Limitless part size

Build extremely light, large-scale parts in record time with SL. Highly acurate bonding allows for virtually limitless part size.

Dimensional accuracy

SL creates intricate designs with high dimensional accuracy and smooth surfaces.

Translucent parts

SL is a great choice for high-clarity components for transparent and translucent applications.

Cosmetic finishing

Easily achieve highly cosmetic SL parts. Finishes include: texture, color, artwork decals, EMI/RFI shielding, metal plating and electroplating.