



Stereolithography

A revolutionary technology -Stereolithography (SLA) - creates three-dimensional plastic parts directly from CAD data. A UV laser traces one thin cross section at a time, solidifying a light sensitive resin. The layer is lowered into a polymer vat, and successive layers are built until the object is complete.

Because the SLA replicas are solid objects, it is easy to evaluate and approve form, fit, function, and aesthetic characteristics. SLA models can be used as masters for Urethane castings.

Stereolithography technology is especially advantageous for objects designed with thin walls, and/or intricate details.

Laminated Object Manufacturing

The Laminated Object Manufacturing (LOM) technology replaces time consuming manual modeling such as clay or wax sculpturing and wood carving. It utilizes CAD-based data and a CO₂ laser to cut layers of paper coated with heat-seal adhesives to "laminates" the part to final form.

The multi-laminar structure is built one paper layer at a time. A laser cuts the outline and any interior features of a cross-section. The layer is bonded to the top of the previously cut layer. The automated process is repeated until the structure is complete.

The LOM process creates three-dimensional, wood-like part replicas. It is advantageous for producing large and bulky parts, and can be used as masters for metal casting.