

## PROCESSES

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### LASER SINTERING (LS)

Thermally fusing (sintering) powdered material with a CO2 laser to “grow” complex objects layer-upon-layer from sliced 3D CAD data (.STL files). The key advantage of LS is its ability to rapidly and cost-effectively produce highly complex functional prototypes and end-use parts for a wide variety of applications.

- Durable and functional parts and assemblies
- Cost-effective tool-less low volume production
- Variety of plastic and elastomeric materials
- Rigid and flexible plastics
- Living hinge and high-flex snap capabilities

### ADDITIVE METALS

Fusing powdered metal layer-upon-layer to “grow” complex objects from sliced 3D CAD data (.STL files). The key advantage of additive metals is its ability to rapidly and cost-effectively produce highly complex metal prototypes and end-use parts with fine detail. These processes include Direct Metal Laser Sintering (DMLS), Selective Laser Melting (SLM) and Electron Beam Melting (EBM).

- Durable and functional parts and assemblies
- Cost-effective, tool-less low volume production
- Metal parts in days rather than weeks
- Can be machined, polished, and/or heat-treated
- High strength metals and alloys

### STEREOLITHOGRAPHY (SL)

Curing (solidifying) photo-sensitive liquid resins with a UV laser to “grow” complex objects layer-upon-layer from sliced 3D CAD data (.STL files). The key advantage of SL is its ability to rapidly and cost-effectively produce highly complex show models and light-duty functional prototypes with exceptional detail, finishing, and dimensional tolerance.

- Models with fine detail and smooth surface finish
- Variety of rigid and flexible plastics
- Flexible snap fits and air-tight/water-tight capabilities
- High-temp, nano-composite materials

### POST-PROCESSING

Harvest offers a wide variety of post-processes that enhance the aesthetic and functional properties of parts we produce. These capabilities include:

- Master finish - extra smooth polishing
- Priming, painting, dyeing, and clear coating
- Plating and texturing
- Inserts, taps, and helicoils
- Assembly
- Post-machining
- Pantone color-matching

### CASTING AND MOLDING

Casting and molding urethane, composite, and metal objects from short run molds formed using rapid patterns and molds. The key advantage is creating production-grade parts in a fraction of the time without the expense and time consumption of traditional tooling methods.

- Wide array of materials and aesthetic options
- Capable of good detail and smooth surface finishing

### CNC MACHINING

Cutting and shaping (milling and turning) high quality plastic and metal objects from billet stock (blocks). The key advantage is the ability to quickly produce high quality prototypes and production parts with high strength and tight tolerancing.

- Wide variety of materials
- Capable of very fine detail and smooth surface finishing