



*TECHNOLOGY  
TO GROW  
YOUR BUSINESS*

# ADDITIVE MANUFACTURING CENTER

## CONCEPT TO PRODUCT IN HOURS, NOT WEEKS

Additive technology provides a new set of solutions to swiftly improve conventional manufacturing, prototyping, and product development.

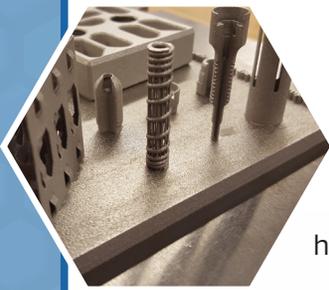
### THE VALUES OF ADDITIVE MANUFACTURING

- **Design complexity** – Change the way you think about design and create products that solve problems without added features or material. With fewer limitations than conventional manufacturing methods, your product is made to do exactly what it's meant to – no more, no less.
- **Production flexibility** – Take advantage of additive's ability to build complex geometries, fill gaps, and reduce speed bumps - whether you need fifty of one piece for a short production run, or one of fifty pieces for custom applications.
- **Digital inventory** – Stop tying up dollars in inventory for low volume products that risk design change. Instead, store your parts in digital form and only make what you need, when you need it.
- **Conserve precious capital** – Move your product into production without the high capital required for permanent tooling. Use built-to-order parts to determine the size of your market directly rather than speculating.
- **Design validation** – Reduce false starts and wasted costs by producing samples of new designs before they reach the factory floor. Validate your designs with a prototype, using multiple material options to be sure that it's ready for your manufacturers and customers.



### CALL TO LEARN ABOUT OUR ADDITIVE CAPABILITIES.



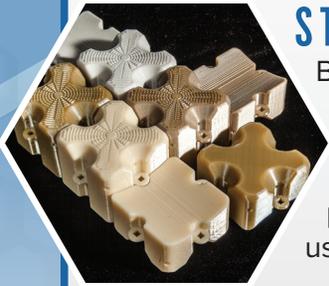
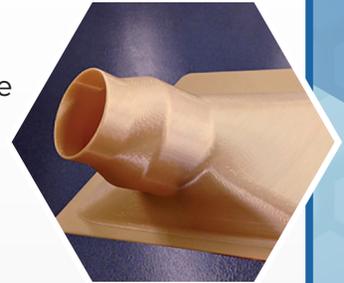


## DIRECT METAL LASER MELTING (DMLM)

With a host of material options, print a metal product that will perform as well as a cast or machined piece. Produce simple or complex parts that are ready to use in high-stress or high-heat applications faster than machining or investment casting.

## FUSED DEPOSITION MODELING (FDM)

With the largest print platform, FDM uses typical injection molding plastics to provide high strength parts that are great for testing or finished products. By injecting heated material filament, FDM literally draws the product in melted plastic three dimensionally. This machine is excellent for providing large and high strength parts quicker than most other options.

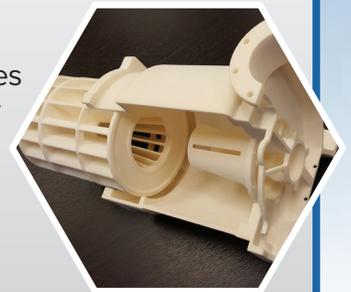


## STEREOLITHOGRAPHY (SLA)

By lowering a platform in a large container of liquid resin, SLA machines use focused ultraviolet light to illustrate each layer of the build. Available materials mimic ABS and polypropylene, two very common industry plastics. The parts are made with very thin layers providing a smooth surface that closely approaches the look of injection molded pieces. Any products built from this machine are excellent for demonstration and can be used in lower stress applications.

## SELECTIVE LASER SINTERING (SLS)

Using lasers to illustrate each layer on a bed of nylon powder, the SLS technology creates some of the strongest bonds available. Allowing for better aesthetics than FDM, higher strength than SLA, and added flexibility, SLS is used more frequently than any other technology for end-use applications.



## POLYJET

With a printing device very similar to common inkjet printers, this technology injects material, layer by layer, to grow the part on a platform. Polyjet is the fastest and highest resolution printing available at SiMT. It is also the only technology available to combine materials in one build operation. Whether making separate parts, ready-to-use assemblies, chemically bonded joints, or material blends, this machine offers the highest number of material possibilities around.