

POSITRON

ADDITIVE



EQUIPPED WITH
LATEST
7
AM TECHNOLOGIES
35+
MATERIALS AND
FINISHING
COMBINATIONS

21K +
PARTS
MANUFACTURED
ANNUALLY

Positron Additive delivers industrial 3D printing service for professional and individuals. By streamlining and innovating on the workflow process for businesses to create the easiest solution to go from a 3D file to a real object, whether for a prototype only or for a whole batch of products. We make 3D as simple as 2D.

**BETTER
FASTER
STRONGER**

ABOUT US

Started in 2018, Positron Additive delivers industrial 3D printing service for professional and individuals. By streamlining and innovating on the workflow process for businesses to create the easiest solution to go from a 3D file to a real object, whether for a prototype only or for a whole batch of products. We make 3D as simple as 2D.

We seamlessly bring ideas off screens and into real life. From the one-person garage operation to a global corporation making the next big thing, we help businesses of any size to get parts in their hands fast, enabling them to create, iterate, and prototype faster.

We provide high-quality 3D Printing, prototyping & batch manufacturing services to support your product development needs. Equipped with latest 7 technologies and 35+ materials and finishing combinations in 3D printing.

We also provide design, consulting, and expert production advice along with our professional 3D printing service to support your growth. Positron Additive's open and flexible solutions enable players in a wide variety of industries, including healthcare, automotive, aerospace, art and design, and consumer goods, to build innovative 3D printing applications that aim to make the world a better and healthier place.

GOAL

Empowering Innovation, Embracing Additive Paradigm

Our goal is to free creativity & innovation from the technical hassle of manufacturing constraints. Together, we print things beyond what's possible. Keeping your team laser-focused on the end goal, while we handle the rest.

VALUES

1. Integrity & Transparency
2. Customer Values
3. Excellence & Pioneer
4. Continuous Improvement
5. Synergy & Social Responsibility

ON DEMAND MANUFACTURING SERVICES

POSITRON ADDITIVE'S PRINT SERVICES

Together, we print things beyond what's possible. We provide 3D Printing, prototyping, batch manufacturing services to support your product development needs. Equipped with latest 7 technologies and 35+ materials and finishing combinations in 3D printing.

The benefits

- Our experts work alongside your team, building additive knowledge enabling you to meet your design, materials science and manufacturing challenges.
- Printing additive parts is both an art and science. The right experience and technological equipment are necessary to print successful parts that meet product requirements. Through our own experience building additive parts on a production scale, we have acquired a robust set of machinery to handle the needs of 3D printing & post processing.
- Accelerate the part production and testing processes to improve overall speed to market
- Design and produce multiple product versions simultaneously
- Eliminate the need for expensive tooling and molds which can have long lead-times
- Drastically reduce the waste associated with milling and machining

FDM (FUSED DEPOSITION MODELLING)

RS.25/CC

FDM is the most cost-effective way of producing custom thermoplastic parts and prototypes. It also has the shortest lead times - as fast as next-day-delivery - due to the high availability of the technology. A wide range of thermoplastic materials is available for FDM, suitable for both prototyping and some functional applications.

Merits Low-cost prototyping Fast turn-around (less than 24 hours) Functional applications (non-critical load)

Materials: ABS, PLA, TPU(Rubber like), PETG, PC.

- Low Volume Production of complex end-use parts
- Prototypes for form, fit, and function testing
- Casting Foundry Patterns
- Master Patterns for Sculpture Industries
- Pre-Surgical Planning Bone Model
- Mock up models for Retail space

Max Dimensions: Dimensions are unlimited as components may be composed of several sub-parts. The maximum build envelope is 360 x 360 x 410 mm

Dimensional Accuracy: $\pm 0.15\%$ (with a lower limit on ± 0.3 mm)

Minimum Wall Thickness: Not lower than 1.0 mm



SLA/DLP (STEREOLITHOGRAPHY)

RS.45-75/CC

SLA/DLP can produce parts with very high dimensional accuracy, intricate details and a very smooth surface finish ideal that are ideal for visual prototypes. A large range of special materials, such as clear, flexible, castable and bio-compatible resins, or materials tailored for specific industrial applications, are also available.

Merits High accuracy & intricate details Smooth surface ideal for visual prototypes Large range of specialty materials.

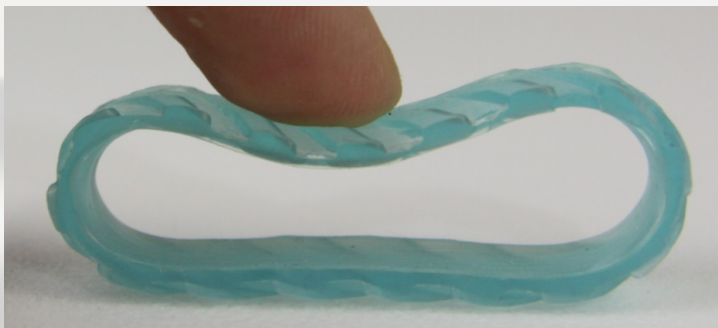
Materials: Clear Resin, Flexible, Elastic, White, Black, Castable

- Low Volume Production
- Mock-up of actual product
- Dental & Jewelry Models for direct metal casting
- Flexible & Elastic Materials
- Master pattern for Vacuum Casting
- Sculpture master patterns
- Crown & bridge model
- Clear aligners models

Max Dimensions: 600 x 650 x 400 mm dimensions are unlimited as components may be composed of several sub-parts

Dimensional Accuracy: $\pm 0.15\%$ (with a lower limit of ± 0.2 mm)

Minimum Wall Thickness: Not lower than 1.0 mm



MJF (MULTI JET FUSION)

RS.45/CC

HP Multi Jet Fusion (MJF) technology is a powder-bed fusion 3D printing technology that allows for the production of accurate, functional prototypes and final parts, including color parts. In addition, HP MJF is a technology that does not require support structures, thus enabling the design of complex geometries without additional costs, which would be expensive or not even possible to produce with traditional manufacturing processes.

Materials: PA12 (Nylon-Black/Grey)

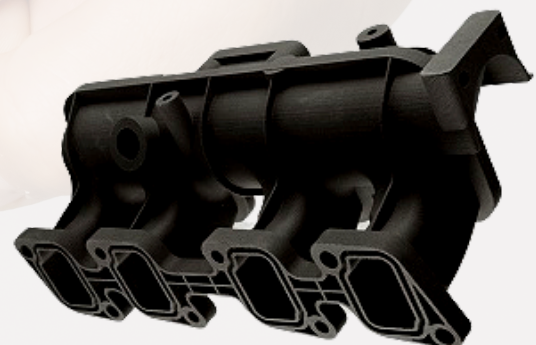
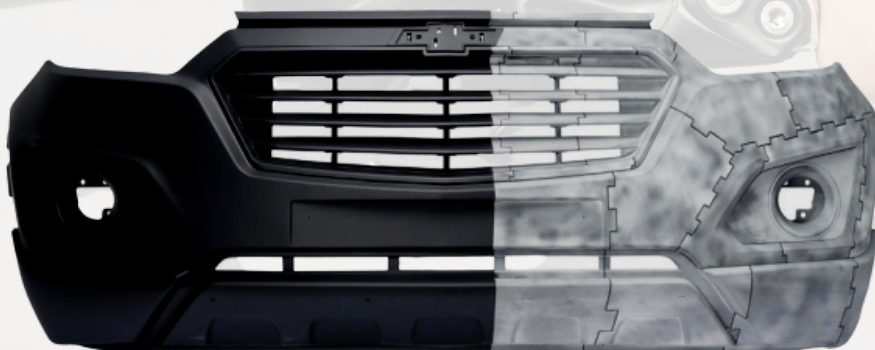
- Low Volume Production
- Prototypes with mechanical properties to rival those of injection-molded parts
- Economical production of unique, complex designs built as one-off products or in small batches
- Lightweight designs using complex lattice structures



Max Dimensions: Dimensions are unlimited as components may be composed of several sub-parts. The build area of our largest machine is 380 x 284 x 380 mm

Dimensional Accuracy: $\pm 0.20\%$ (with a lower limit of ± 0.3 mm)

Minimum Wall Thickness: Minimum allowable thickness would be 1 mm, but living hinges are possible at 0.5 mm



SLS (SELECTIVE LASER SINTERING)

RS.45/CC

SLS is used for both prototyping of functional polymer components and for small production runs, as it offers a very high design freedom, high accuracy and produces parts with good and consistent mechanical properties.

SLS belongs to the Powder Bed Fusion family. In SLS, a laser selectively sinters the particles of a polymer powder, fusing them together and building a part layer-by-layer.

Materials: PA2200 (Nylon-White)

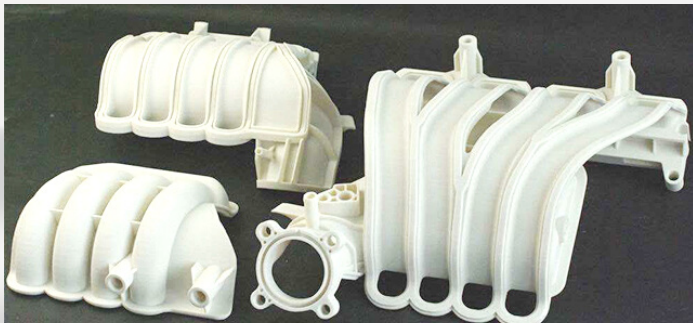
- Low Volume Production
- Prototypes with mechanical properties to rival those of injection-molded parts
- Economical production of unique, complex designs built as one-off products or in small batches
- Lightweight designs using complex lattice structures



Max Dimensions: Dimensions are unlimited as components may be composed of several sub-parts. The build area of our largest machine is 340 x 340 x 600 mm

Dimensional Accuracy: $\pm 0.3\%$ (with a lower limit of ± 0.3 mm)

Minimum Wall Thickness: 1 mm, but living hinges are possible at 0.3 mm



VC (VACUUM CASTING)

How VC works?

The VC process starts by placing a two piece silicone mold in a vacuum chamber. The raw material is mixed with degassed and then poured into the mold. The vacuum is then released and the mold removed from the chamber. Finally, the casting is cured in an oven and the mold removed to release the completed casting.

Why to choose VC?

Vacuum Casting is a copying technique used for the production of small series of functional plastic parts. Using two-component polyurethanes and silicone molds, Vacuum Casting is known for its fast production of high-quality prototypes or end-use products. Silicone molding results in high-quality parts comparable to injection-molded components. This makes vacuum casted models especially suitable for fit and function testing, marketing purposes or a series of final parts in limited quantities. Vacuum Casting also lends itself well to a variety of finishing degrees, and we can match the finish you need for your parts.

Materials: We offer an exceptional range of polyurethanes that are similar to rubber, PP, ABS, and PC. These materials provide an outstanding variety of properties and offer the possibility to match colors and cast transparent components. If you are looking for a specific finish, our skilled post-production team for Vacuum Casting will match your requirements.

Ideal Applications:

- Pre-launch product testing
- Small series of housings and covers
- Concept models and prototypes



Max Dimensions: Dimensions are unlimited as components may be composed of several sub-parts. The build area of our largest machine is 700 x 900 x 750 mm

Dimensional Accuracy: $\pm 0.3\%$ (with a lower limit of ± 0.3 mm on dimensions smaller than 100 mm)

Minimum Wall Thickness: To ensure that the mold is filled properly, a wall thickness of at least 0.75 mm is necessary. For best results, we recommend a wall thickness of at least 1.5 mm



METAL 3D PRINTING

How Metal AM works?

Direct Metal Laser Sintering (DMLS) and Selective Laser Melting (SLM) produce parts in a similar way to SLS: a laser source selectively bonds together powder particles layer-by-layer. The main difference, of course, is that DMLS and SLM produce parts out of metal.

Why to choose Metal AM?

This technology combines the design flexibility of 3D Printing with the mechanical properties of metal. From tooling inserts with cooling channels to lightweight structures for aerospace, any application that involves complex metal parts potentially benefits from Metal 3D Printing.

Materials: (AlSi10Mg)Aluminum, Stainless Steel 316, Copper, Tool Steel

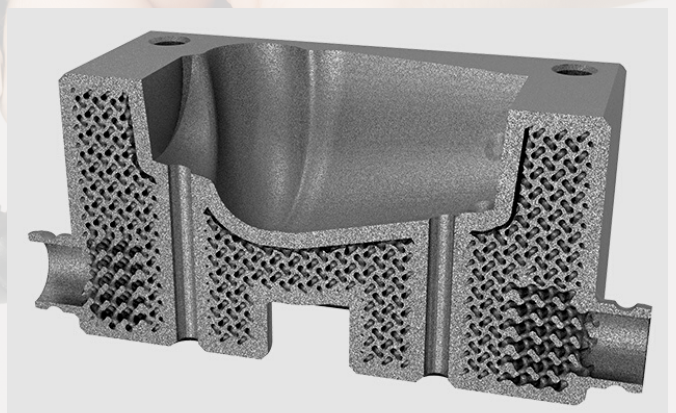
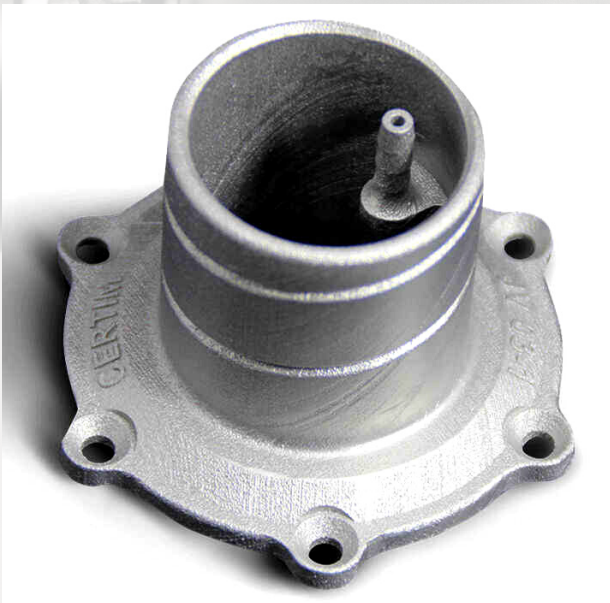
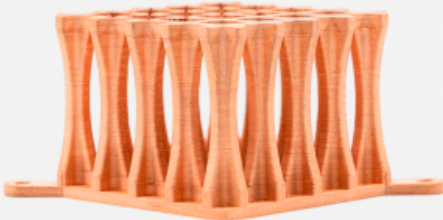
Ideal Applications:

- Fully functional prototypes
- Production tools
- Tooling such as molds and inserts
- Rigid housings
- Ductwork
- Spare parts
- Heat exchangers and heatsinks

Max Dimensions: Dimensions are unlimited as components may be composed of several sub-parts. The build area of our largest machine is 250 x 250 x 325 mm

Dimensional Accuracy: In accordance with DCTG 6 of DIN EN ISO 8062-3: 2008-09 for dimensions up to 400 mm and DIN ISO 2768 -1 g (rough) for dimensions between 3 mm and 400 mm.

Minimum Wall Thickness: Minimum allowable thickness would be 0.5 - 1 mm



LET'S CONNECT

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We not only provide the widest choice of materials, we'll also help you get the best out of them,

We're continually developing and investing in our hardware, software and services to help you get the best possible results. Improving accuracy, flexibility and reliability. All in less time, with less hassel.

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