NCS TECHNOLOGIES

ADDITIVE MANUFACTURING

IN-HOUSE MANUFACTURING SOLUTIONS: Advancements in print technology now make AM a powerful in-house option

CORPORATE OVERVIEW

1996
Established in Virginia

Manassas, VA
Headquarters

108,000 sqft
Secure State-of-the-Art Facility

Expertise
Design, Engineering, Integration, Manufacturing, Logistics, and 3D Printing

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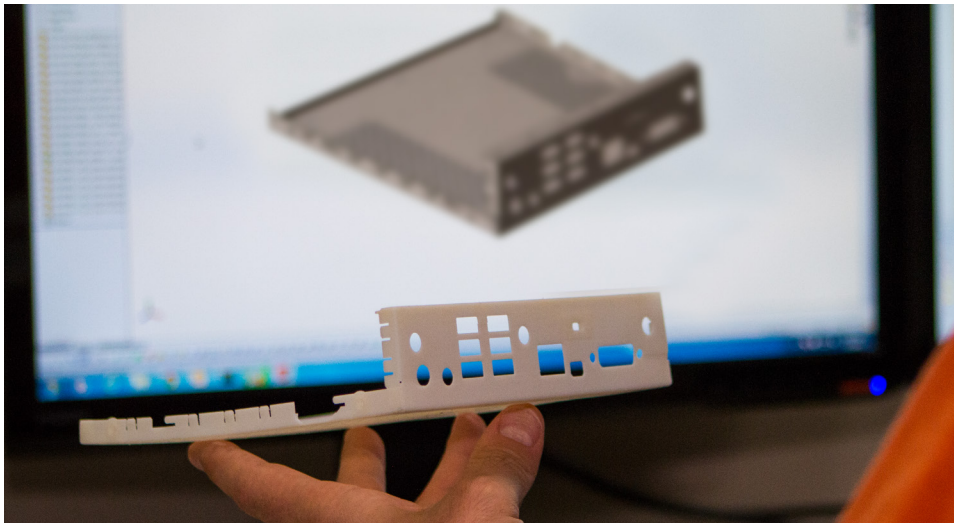

Revolutionize your prototyping and parts production with additive manufacturing (AM). Advancements in print technology now make AM a powerful modern manufacturing solution, freeing you from the limitations of traditional plastic and metal parts making practices.

Supply chain delays, shortage of parts, and reliance on third-party manufacturing adversely impact your operations and the speed of innovations. As an authorized reseller of the leading additive manufacturing brands, NCS proudly represents HP, Roboze, Nano Dimensions, NEXA 3d, UltiMaker, and nScrypt. Our partners offer a unique set of printing capabilities from the types of materials such as polymers, super polymers, and metals to printing technologies such as MJF, DLP, SLS, Open FDM, and Advanced FDM.

3D Print Partners

hp · nexa3D · NANO DIMENSION · Roboze · nScrypt · UltiMaker

NCS offers a one-stop shop for all your AM needs.

As an authorized reseller of leading AM brands like HP, Roboze, Nano Dimensions, NEXA3D, Ultimaker, and nScrypt, NCS offers a one-stop shop for all your AM needs. Our partners provide cutting-edge printers with unique capabilities, including pick and place functionality for enhanced automation.

UNLEASH THE BENEFITS

Rapid Prototyping: Streamline your development cycle with rapid creation of functional prototypes, iterating faster and shortening time to market.

Reduced Reliance on Third Parties: Eliminate the risks and delays of external suppliers. Print parts on-demand, minimizing downtime and maintaining control over your projects.

Expanded Material Options: Print with a diverse range of materials, from polymers and super polymers to various metals, allowing for increased functionality and customization.

FULL LIFECYCLE SUPPORT

We go beyond simply selling equipment. NCS is your trusted advisor, guiding you through every stage of your AM journey. We'll help you with:

Site Selection: Ensure you have the proper space for your AM system.

Installation and Training: Get your printer up and running smoothly with expert installation and comprehensive training for your team.

Maintenance and Supplies: Maintain peak performance with ongoing maintenance plans and a reliable source of print materials.

Warranty Support: Rest assured with comprehensive warranty coverage for your AM equipment.

Government Contracting (US): We'll assist you in selecting the most suitable contract for your agency.

Take control of your manufacturing. Partner with NCS for a seamless transition to in-house additive manufacturing.

NCS 3D PRINT SERVICES

NCS 3D Print Services provides professional 3D printing solutions, offering access to advanced printing technologies and materials. Users can upload their 3D models, choose materials and finishes, and receive high-quality printed parts.

The advantages of using our print service include;

- Reducing cost for prototypes and short-run production parts.
- Leveraging our expertise in various printing technologies.
- Having quick turnaround times.
- Producing complex and custom parts with high precision and reliability.

All of which streamline the prototyping and manufacturing process.

At NCS we can evaluate your project and provide guidance on the best technology and materials that will suit your needs. We will consider the best technical solution that will satisfy your budget, all while keeping your deadline in mind.

Print Technologies Breakdown

MJF

Multi-Jet Fusion (MJF) is an advanced 3D printing process where a fine layer of powder material is selectively fused by applying a fusing agent and then exposing it to infrared light, building parts layer by layer from a digital 3D model.

The advantages of MJF include high production speed, excellent mechanical properties, and fine detail resolution, making it suitable for producing functional prototypes and end-use parts with consistent quality.

Polymer or Metal Capable
Polymers include: Rigid, Flexible, Nylon PA11, PA12, PA12GB, TPA, TPU, Rigid or Flexible. Metal Jet Printer Materials includes: Steel, SS, Tool Steel, Titanium, Aluminum, etc.

DLP

Digital Light Processing (DLP) 3D printing uses a digital light projector to cure photopolymer resin layer by layer, creating precise and detailed parts based on a digital 3D model.

This process offers advantages such as high resolution, fast printing speeds due to simultaneous layer curing, and the ability to produce smooth surface finishes, making it ideal for applications requiring fine details and accuracy.

Polymer Capable
Polymers include: Rigid, Flexible, PP, Clear, ABS, Model, Tooling, Ceramic, ESD, TPU, etc. Dental/Biocompatible include: Dental, Guides, Soft, Tray, Ortho, etc.

SLS

Selective Laser Sintering (SLS) is an additive manufacturing process that uses a high-power laser to fuse small particles of powdered material into a solid structure, layer by layer, based on a digital 3D model.

This technique offers advantages such as the ability to produce complex geometries with high precision, minimal material waste, and the capability to use a wide range of materials, including polymers and metals.

Plastic or Metal Capable
Polymers include: Nylon, Nylon Carbon Fiber, etc. Rigid, Flexible, and Flame Retardant. Metals include: SS17-4PH, SS316L, Titanium, & M2.

Open FDM / Advanced FDM

Fused Deposition Modeling (FDM) is an additive manufacturing process where a thermoplastic filament is heated and extruded through a nozzle to build parts layer by layer according to a digital 3D model. Advanced FDM uses a heated build chamber to produce certifiable parts.

Advantages of FDM include its cost-effectiveness, ease of use, and the ability to produce durable and functional prototypes with a variety of thermoplastic materials, making it accessible for both professional and hobbyist applications.

Plastic or Metal Capable
Polymers include: PEEK, Carbon PEEK, Carbon PA, PEKK, PLA, ABS, TPU, PP, PET, PETG, PC, etc. Rigid & Flexible choices.

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