

3D Systems On Demand

Additive and Traditional
Manufacturing Services



3D Systems On Demand Parts Services



Appearance Models

Experience and evaluate your design before entering production

Turn your CAD files into highly realistic, physical parts and assemblies, used for aesthetic review, internal evaluations, mechanical and electrical functions.



Rapid Prototyping

A design prototype in as little as 24 hours

The inventor of 3D printing offers the widest range of 3D printers, materials and expertise to customers looking to jump-start product development.



Functional Prototyping

Reliable quality and service for product development

Functional prototyping enables you to assess factors such as usability, ergonomics, manufacturability and materials testing before investing in tooling. The result: shorter development cycles, saving you time and money.



Low-volume Production

Quality and responsiveness for short-run production

Low-volume manufacturing from 3D Systems On Demand helps customers reduce tooling costs, produce customized products, and bring a product to market quicker while higher-volume production molds are being completed.

Why 3D Systems On Demand?

- Fast and easy engagement
- Consultancy from the start by experienced engineers
- Global resources, local manufacturing
- Credibility of a global market leader
- One partner for the complete value chain of prototyping: from the first models through different prototypes to pre-series or low-volume production

Your benefits

- One supplier of all relevant prototyping technologies
- Selection of the best process in each single project
- Extensive time and cost savings



Bring your designs to life with
highly realistic appearance
models



RAPID PROTOTYPING

Evaluate production-like parts before you commit to costly production

Local Manufacturing, Global Resources



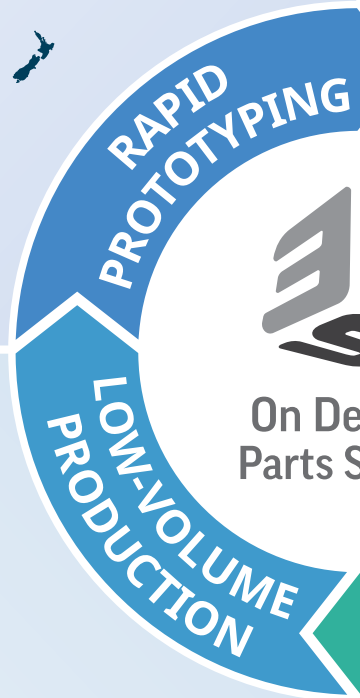
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Facilities globally

Parts can be produced in

 **24**
hours



Millions parts/year

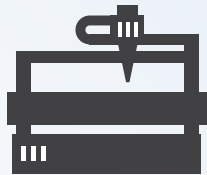


LOW-VOLUME PRODUCTION

Reduce or eliminate tooling, enable customization and speed time-to-market



3D PRINTING



CNC



INJECTION MOLDING



FIGURE 4

Fast part production from

1 to **100,000+**

with additive and subtractive manufacturing



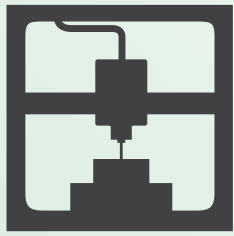
SAVE DAYS

getting your designs into production

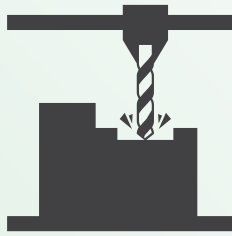


MULTIPLE

ADDITIVE MANUFACTURING CHOICES FOR FUNCTIONAL PROTOTYPING



ADDITIVE



TRADITIONAL

FUNCTIONAL PROTOTYPING

Assess real-world usability, ergonomics, manufacturability and materials before production



Every functional prototype is created with an average of

3 different processes

30,000+

FUNCTIONAL PROTOTYPES MANUFACTURED TO DATE

EXPERIENCED APPLICATION ENGINEERS

with an average of

10+

 years of experience

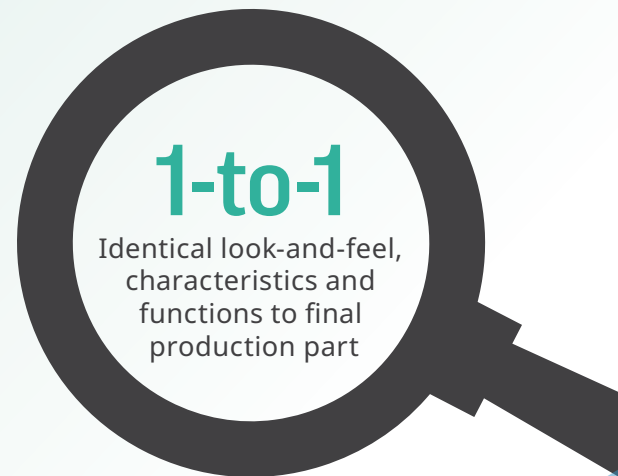
APPEARANCE MODELS

See your designs in reality before series production - with full functions and perfect, life-like looks



TO SCALE, LIFE-LIKE MODELS

- ✓ METICULOUS ENGINEERING
- ✓ PERFECT FINISHES
- ✓ INCLUDE MECHANISMS, LIGHTING AND MORE
- ✓ MECHATRONICS DESIGN AND INSTALLATION



Technologies available for the production of Appearance Models

From Prototyping to Production

3D Systems On Demand offers the widest range of technologies, processes and materials in the industry. Enabling the best service to manufacturers on their way from the first product idea to series production.

Additive Manufacturing



Stereolithography (SLA)

Delivery: Next-day shipping available

- Highest accuracy, smoothest surface
- Parts up to 1500mm in one single piece



Direct Metal Printing (DMP)

Delivery: 1 – 3 weeks

- Small, complex shapes
– no tooling needed
- Impossible geometries
– now possible



Selective Laser Sintering (SLS)

Delivery: Next-day shipping available

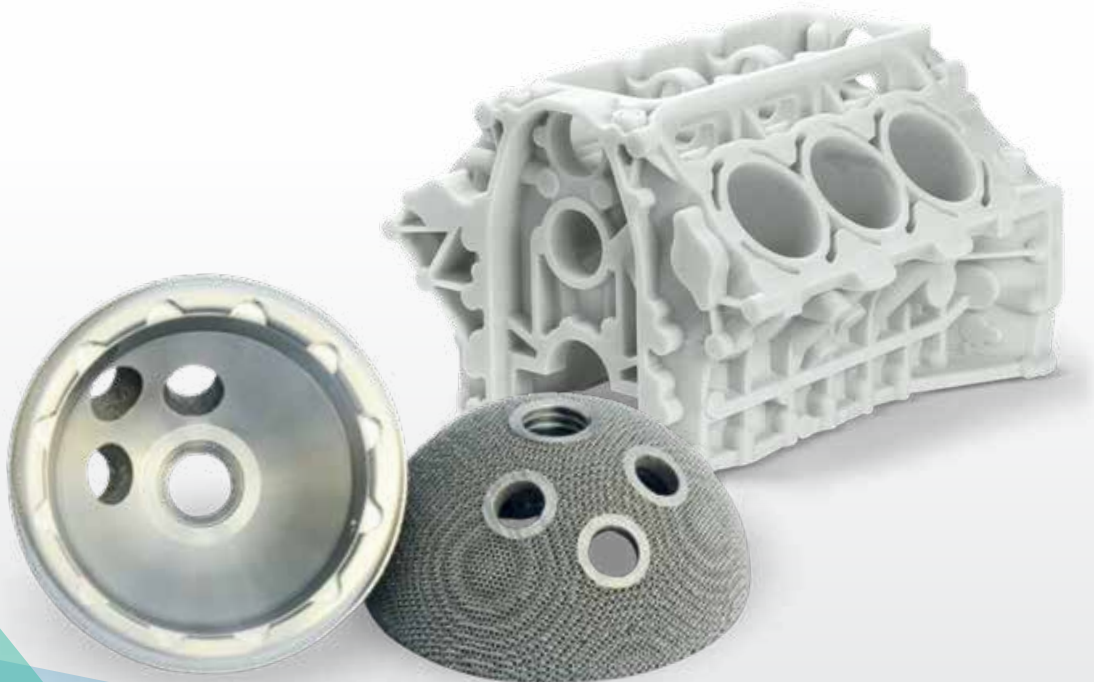
- Highly durable, complex geometries
- Ideal for snap fits, living hinges



Figure 4

Delivery: Next-day shipping available

- Ultra-fast production as alternative to injection molding or cast urethane processes
- High quality, smooth surface finish



Traditional Manufacturing



Vacuum Casting Parts

Turnaround: First off parts from 10 – 12 working days

- For realistic prototypes that mimic Injection Molded parts
- Efficient low-volume production without tooling



CNC-Machined Plastic and Metal Parts

Turnaround: 6 – 8 days

- For rapid prototypes or production parts
- CNC machining options for both metal and plastic parts



Low-Volume Injection Mold Tooling/Parts

Turnaround: 2 – 4 weeks

- Prototypes to production quantities
- Multi-cavity tooling, tight tolerances, over-molding, secondary post-molding operations



Sheet-Metal Parts

Turnaround: 5 – 10 days

- Prototypes to low-volume production
- Large variety of options



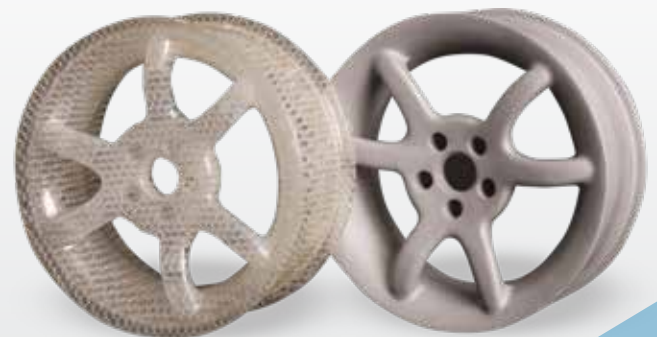
Metal Die Casting

- Small/medium-sized consistent parts, fine surface quality and detail
- Continuous quality control
- Accelerated prototype to production



Investment Casting – QuickCast & Wax Patterns

- For large-scale parts that cannot be tooled
- Shrink/gating information prior to tooling
- High-detail, high-resolution, real wax patterns
- Finest finishes/complexity
- Dramatically reduced time and costs



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3D Systems On Demand manages a network of advanced manufacturing facilities around the world. Our team of application engineers provide expertise and localized support. Contact one of our offices to talk through your next project.

Contact our team at 3dsystems.com/on-demand-manufacturing/contact



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