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.

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**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

10 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

Fast part production from 1 to 100,000+ with additive and subtractive manufacturing

SAVE DAYS getting your designs into production
Evaluate production-like parts before you commit to costly production.

Local Manufacturing, Global Resources

Facilities globally

Parts can be produced in

Millions parts/year

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

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

30,000+
FUNCTIONAL PROTOTYPES MANUFACTURED TO DATE

3 different processes

Every functional prototype is created with an average of

10+ years of experience

FUNCTIONAL PROTOTYPING

EXPERIENCED APPLICATION ENGINEERS

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

1-to-1
Identical look-and-feel, characteristics and functions to final production part

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

<table>
<thead>
<tr>
<th>Technology</th>
<th>Delivery: Next-day shipping available</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stereolithography (SLA)</strong></td>
<td></td>
<td>• Highest accuracy, smoothest surface</td>
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<tr>
<td></td>
<td></td>
<td>• Parts up to 1500mm in one single piece</td>
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<tr>
<td><strong>Direct Metal Printing (DMP)</strong></td>
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<td>• Small, complex shapes</td>
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<td></td>
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<td>• No tooling needed</td>
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<tr>
<td></td>
<td></td>
<td>• Impossible geometries</td>
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<tr>
<td></td>
<td></td>
<td>• Now possible</td>
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<tr>
<td><strong>Selective Laser Sintering (SLS)</strong></td>
<td></td>
<td>• Highly durable, complex geometries</td>
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<td></td>
<td></td>
<td>• Ideal for snap fits, living hinges</td>
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</tbody>
</table>

**Figure 4**

- 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
We Provide Worldwide Service

For an instant quote visit 3dsystems.com/ondemand

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