



# Figure 4™ Factory Solutions

Making 3D production real with scalable, modular high speed digital molding factory solutions



# Productive and Cost-Effective Digital Molding Solutions for Any Production Environment

Figure 4™ is the industry's first scalable, fully integrated 3D printing platform with ultra-fast speed enabling throughput improvement up to 15 times over other 3D printing systems and up to 20 percent lower parts cost compared to traditionally manufactured parts and operations. There is a Figure 4 solution to match any production requirements.

## HIGH SPEED DIGITAL MOLDING

Digital molding reduces development costs, increases productivity and eliminates tooling requirements. Your designs go from CAD to prototyping to manufacturing using a common technology to accelerate and simplify your manufacturing process and time-to-market. Figure 4 delivers repeatable, true-to-CAD part accuracy in an agile, in-line manufacturing workflow.

## MODULAR PLATFORM GROWS WITH MANUFACTURING NEEDS

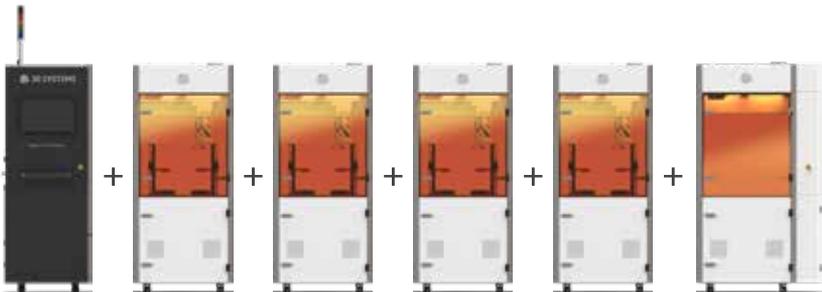
Delivered in configurable units for anytime scalability, Figure 4 allows manufacturing capacity to grow alongside demand—from a standalone printer for rapid prototyping and low volume direct 3D production, to modular systems that grow as your volume grows, up to a fully-automated, fully-integrated factory solution.

## THE FACTORY REDEFINED

3D Systems Figure 4 solutions deliver accurate parts in a diverse range of robust, production-grade materials for immediate part turnaround without the costs and delays of tooling. With unparalleled digital design flexibility enabling anytime updates, Figure 4 takes downtime out of the equation to put parts in hand—with increased productivity, durability, repeatability and lower total cost of operations (TCO).

## GROW WITH FIGURE 4, FROM PROTOTYPING TO PRODUCTION

Use Figure 4 for rapid functional prototyping and concept models, end-use durable plastic parts, digital texturing applications, elastomeric parts, rapid tooling of molds, master patterns and casting patterns, jigs and fixtures, and in replacement of traditional injection molding and cast urethane processes.



# Figure 4™ Production

Industry's first scalable, fully-integrated factory solution for direct 3D production

Figure 4 Production packages the design flexibility of additive manufacturing in configurable, in-line production modules to deliver a customizable and automated direct 3D production solution. Features like automated material delivery and integrated post-processing reduce hands-on processes to streamline operations and lower total ownership costs.



## **AUTOMATION AND THROUGHPUT**

Figure 4 Production is an integrated digital manufacturing solution with an end-to-end digital workflow supported by 3D Systems software, up to 15 times faster print speeds than other 3D printing technologies, automated material handling, integrated post-processing, such as washing, drying and curing, to reduce manual processes and facilitate automation for high volume production.

## **FLEXIBILITY**

Figure 4 Production's scalability and customized configurations enable capacity to meet your present and future needs for unprecedented manufacturing agility.

## **DIGITAL MOLDING ECONOMICS**

Figure 4 Production reduces overhead and provides a flexible and efficient production solution, with up to 20 percent lower part cost with no time or money lost to tooling.

## **INTEGRATED FACTORY SOLUTIONS**

Figure 4™ delivers ultra-fast additive manufacturing technology in discrete cells, allowing it to be placed into automated assembly lines and integrated with secondary processes, including washing, drying and curing.



# Figure 4™ Standalone

Affordable industrial-grade solution for lower cost production parts

Figure 4 Standalone is an affordable and versatile solution for low volume production, and fast prototyping in the tens and hundreds of parts per month. Figure 4 Standalone offers quality and accuracy with industrial-grade durability, service and support.



## FAST TURNAROUND

Achieve same-day functional prototyping iteration and low-volume production with ultra-high print speeds. New designs can be delivered in short timeframes to maintain momentum throughout development.

## LOWER PART COST

With a compact and easy-to-use design, Figure 4 Standalone delivers industrial-grade durability at an affordable price and low total cost of operations. Featuring a manual material feed, it is augmented with separate post-processing accessories available for curing.

**COMING SOON!**

# Figure 4™ Modular

Upgradeable 3D production solution design to scale with growth

With the flexibility to adapt to production layouts, Figure 4 Modular is an affordable 3D production solution that grows with your business, perfect when a single high throughput line can serve a multitude of parts being produced, and centralized post-processing is preferred.

Figure 4 Modular is ideal for medium output and features an automated material feed system. With expandable capacity up to 24 print engines, Figure 4 Modular enables affordable part production in a flexible, modular system architecture, offering separate post-processing accessories for curing.

## VERSATILITY

Capable of digital texturing that rivals injection molded part quality without the time and cost of tooling, Figure 4 Standalone creates parts that combine high resolution with exceptional surface quality and mechanical properties from a variety of robust, production-grade materials. Quick and easy material changeover allows for functional prototyping and production applications diversity with the same printer.



## END-TO-END SOFTWARE SOLUTION FOR FIGURE 4 WORKFLOWS

Figure 4 solutions use 3D Sprint, 3D Systems' advanced software for file preparation, editing, printing and management from a single, intuitive interface. 3D Sprint enables the customer to significantly decrease cost of ownership of their 3D printers by reducing the need for costly software seats by third party vendors. 3D Sprint automatically generates exceptionally efficient supports requiring far less material, which can lead to significant savings.

## A NEW LEVEL OF MANAGEMENT IN 3D PRODUCTION

### 3D Connect Service

3D Connect Service provides a secure cloud-based connection to 3D Systems service teams for proactive and preventative support to enable better service, improve uptime and deliver production assurance for your system.

### 3D Connect Manage

3D Connect Manage helps customers manage and monitor equipment with anytime, anywhere access to print jobs, system performance metrics and usage.

## Broad Range of Materials

3D Systems' Material Design Center has over 30 years of proven R&D experience and process development expertise. The production-grade materials available for Figure 4 include a broad and expanding range of industrial, dental and custom materials to enable true replacement of injection molding and urethane casting.

### Figure 4 TOUGH-GRY 10

High speed, rigid, dark gray material for production applications

### Figure 4 TOUGH-GRY 15

Rigid gray material for production applications

### Figure 4 ELAST-BLK 10

Elastomeric black material for design and test applications

### Figure 4 JCAST-GRN 10

Castable green material for jewelry applications



**Figure 4 Standalone****Figure 4 Production**

Build Volume (xyz)	124.8 x 70.2 x 196 mm (4.9 x 2.8 x 7.7 in)	124.8 x 70.2 x 346 mm (4.9 x 2.8 x 13.6 in)
Max Resolution	1920 x 1080 pixels	1920 x 1080 pixels
Pixel Pitch	65 microns (0.0025 in) (390.8 effective PPI)	
Software	3D Sprint for preparing and optimizing design file data and managing the additive manufacturing process.  3D Connect for proactive and preventative remote diagnostics, bringing IIoT management to 3D production.	
Build Materials	Figure 4 TOUGH-GRY 10 – Rigid dark gray Figure 4 TOUGH-GRY 15 – Rigid gray Figure 4 ELAST-BLK 10 – Elastomeric black Figure 4 JCAST-GRN 10 – Castable green	30+ UV curable materials, including: <ul style="list-style-type: none"> <li>• Industrial plastic resins</li> <li>• NextDent biocompatible dental resins</li> <li>• Orthodontic tooling resins</li> <li>• Custom materials (additional cost)</li> </ul>
Material Handling	Manual pour	Automated replenishment
Post-Processing	Optional centralized post-curing accessory available	Optional integrated post-processing cells (customization available)

Digital texturing on air vent cover printed on Figure 4 technology



Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.



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