3D SYSTEMS

FIGURE 4® 135

Lightning-Fast, Ultra-Precise 3D Printing for Small, Complex Parts

The industry's most advanced manufacturing solution for connectors, accessories, and more

From Production-grade Micro Parts to Snap Fits, Perfect Every Time

The Figure 4® 135 is a compact, purpose-built solution for high-throughput additive manufacturing of small, precise parts and components, offering best-in-class precision, repeatability, production speed and material performance. New features like auto-door and auto-filling from high volume resin cartridges enable more efficient workflows and reduce hands-on time for operators. With built-in cybersecurity compliance and capable of +/- 50 µm tolerance, this 3D printer brings unprecedented levels of accuracy, throughput and security.

Typical Applications

- Direct production of end-use small plastic parts
- Flame retardant (FR) parts for electronics and connectors
- RTI Electrical rating-compliant parts production
- Thin wall components
- Prototyping and testing
- Housings, covers and snap-fits
- Sensors
- Knobs, grommets and spacers

Used Where Precision and Repeatability are Critical

- Electronics/Microelectronics
- Aerospace and Defense
- Medical Devices
- Optics/Photonics
- Automotive, Motorsports and EV
- Robotics & Automation

With the Figure 4 you can:

- Eliminate need for and cost of tooling in lower volume SKUs
- Build productivity through very fast, tool-free digital production
- Deliver highly accurate, production-grade parts from a variety of proven materials
- Produce parts compliant with RTI Electrical regulations

Wire harness components printed in Figure 4 High Temp 150C FR Black

Momentary Socket Connectors printed in Figure 4 Tough 75C FR Black

Connectors printed in Figure 4 Tough 75C FR Black

Connector printed in Figure 4 Tough 75C FR Black

Connector printed in Figure 4 Tough 75C FR Black

Break Out of the Mold with Figure 4 135

The Figure 4 135 delivers production-grade parts that can replace or complement traditional manufacturing, eliminating the delays, costs, and limitations of injection molding. While mold tooling works for high-volume production, it comes with high upfront costs, long lead times, expensive design changes, and ongoing storage and maintenance. By contrast, advanced additive manufacturing offers a faster, more flexible, and more cost-effective alternative.

Lower volumes, better ROI
Injection molding can be unprofitable for small parts in limited runs due to tooling costs (tens of thousands of dollars) and weeks-long production delays.

No tooling or storage costs
3D printing eliminates the expense and upkeep of mold storage and maintenance.

Faster iteration
Digital workflows allow rapid design changes, bridge manufacturing, and quick response to post-launch modifications.

High-mix SKU advantage
Ideal for low-volume, high-mix production, tool obsolescence, or new product launches where flexibility and speed matter most.

A Practical Example

Let's take a typical case of a complex SKU of 5,000 parts: A Figure 4 135 printer producing 20 parts per plate can make 180 parts/day. That's a 5,000-part SKU in 28 days, or nine SKUs per year—about the same output as nine mold tools, without the 10-15 week lead time or $270+ total upfront tooling cost. Over three years, that's 27 tools replaced, potentially saving more than a million dollars in tooling costs across a production line.
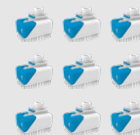

Over a typical year, for an example SKU made of 5,000 parts, one 3D printer can deliver equivalent production output to nine mold tools.
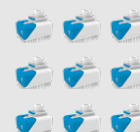
Year 1
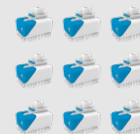
The same 3D printer can be used for ~3 years, potentially more. So, the real equivalent is one 3D printer to 27 injection mold tools.

Year 2

Year 3

Leading Portfolio of Production-Grade Materials

The Figure 4 135 is built to run with the Figure 4 line of engineering and production-grade resins, producing parts that match injection-molded material performance while offering best-in-class surface smoothness.

Choose from our ever-expanding range of rigid, tough, durable with thermoplastic-like behaviors, castable, heat- and fire-resistant, and biocompatible capable materials in a range of colors and translucencies. Printed parts exhibit long-term UV and humidity stable mechanical properties; up to 8 years for indoor use and up to 1.5 years for outdoor exposure per ASTM D4329 and ASTM G194 methods.

3D Sprint®: Leading AM software for Figure 4 135

3D Sprint is exclusive software from 3D Systems for preparing and optimizing CAD and polygon data and managing the 3D printing process.

- Use a single software application from CAD
- Increase efficiency with optimized data management
- Streamline time to print and finished parts with a single, easy to use interface
- Improve productivity and reduce downtime with printer management and monitoring tools
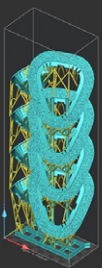
3D Sprint Apps

Convenient plug-and-play additions to the 3D Sprint software.	• Eggshell molding • Digital texturing • SLA early model support • QuickCast®

Available in hand pour 1kg bottles, and selected 9kg auto-refill cartridges:

- Figure 4 Tough 75C FR
- Figure 4 Tough FR V0 Black
- Figure 4 High Temp 150C FR Black
- Figure 4 HI TEMP 300-AMB
- Figure 4 PRO-BLK 10
- Figure 4 Rigid White
- Figure 4 Eggshell AMB 10
- Figure 4 FLEX-BLK 20
- Figure 4 JCast GRN 20
- Figure 4 Tough 65C Black
- Figure 4 Rigid Gray
- Figure 4 RUBBER-65A BLK
- Figure 4 Rigid Composite White

Key Facts about Figure 4 135

Resolution: 50 µm pixel size: Combined with edge smoothing from 3DSprint, it provides very sharp, intricate details

Accuracy: 50 µm <25 mm, +/- 2 µm for every additional mm

Layer thicknesses: 20, 30 and 50 µm

Speed: Maximum print speed of up to 70 mm per hour depending on material in use

Build size: 135 x 76 x 165 mm

Software: Industry-leading 3D Sprint print management software plus add-ons

Reliability & Repeatability: In benchmark studies, it is capable of single digit standard deviations of +/- 50 µm tolerance with a Cpk greater than 3

Materials: Compatible with industry's only AM resin featuring RTI Electrical rating at 150C at 0.4mm, 0.75 mm and 3 mm. Auto-fill material options available

Supports key EU directives **EMC 2014/30/EU, Machinery 2006/42/EC,** and **RoHS 2011/65/EU (EU 2015/863).**

Designed for future alignment with the **EU Machinery Regulation (2023/1230)** and **Cyber Resilience Act (CRA).**

Built with cybersecurity best practices guided by **IEC 62443** standards (3-2, 3-3, 4-1) for industrial security.