HP Jet Fusion 540 3D Printer

Accelerate your creation workflow—produce functional parts in a fraction of the time[1]

Data courtesy of NACAR
The final color of the part may vary.

Accurate, functional parts with intricate detail

- Produce engineering-grade thermoplastic parts with optimal mechanical properties.
- Achieve fine detail and high dimensional accuracy for small features.
- Get accurate and repeatable results.
- Prototype and produce functional parts.

Streamline design— create, test, iterate in hours

- Produce multiple design iterations in the same time it takes to print a single part.[1]
- Access convenient in-house automated 3D printing with the most compact HP Jet Fusion 3D device.
- Get the parts you want when you need them, easily, reliably, and predictably.
- Get immediate access to support and comprehensive training with affordable HP Jet Fusion 3D Solution Services.

Print consistent white parts with voxel control

- Produce clean, white models.
- Stay ahead with a future-ready technology.

For more information, please visit
hp.com/go/3DPrinter540

A fully integrated, compact design

An easy-to-use solution that integrates material mixing and loading, printing, and reclaiming material in one device.
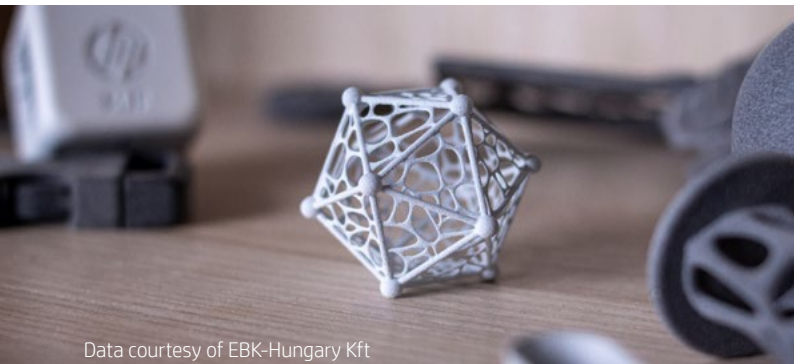
Intuitive user interface

Multi-agent printing with voxel-level control

Enclosed, automated material mixing, loading, and reclamation systems

Designed for small/medium-sized product development teams, design firms, and universities

Image shows the HP Jet Fusion 540 3D Printer

Data courtesy of EBK-Hungary Kft

Data courtesy of 3Shape

Streamline design from prototyping to production

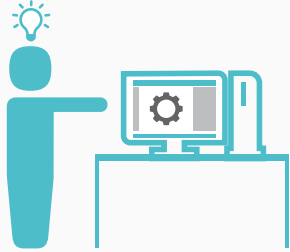Print consistent, quality parts

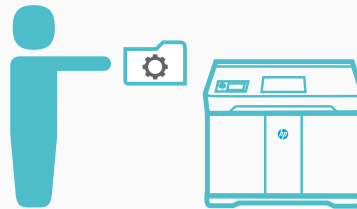Reduce time to market

Data courtesy of NACAR

Reinventing 3D printing

HP Jet Fusion 540 3D Printer

1 Prepare designs:
Open your 3D models and check for errors with the easy-to-use HP SmartStream 3D Build Manager.
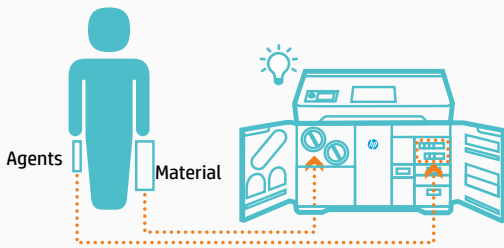
2 Send to print:
Pack your models in the 3D build manager and press "Send to print" to submit your job to the printer.
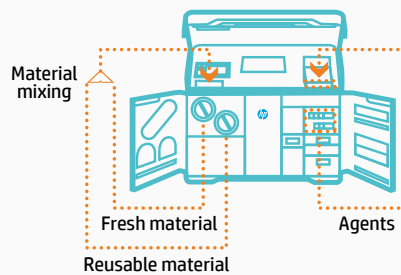
3 Select job:
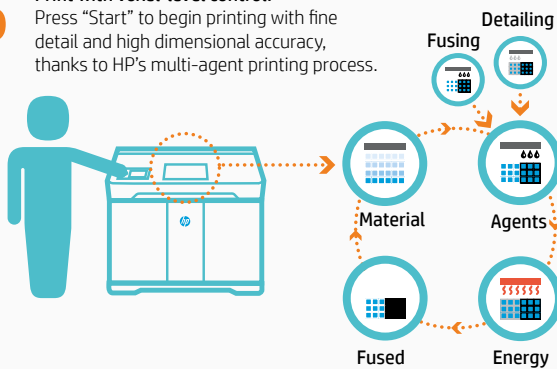Choose your print job at the printer.

4 Add supplies:
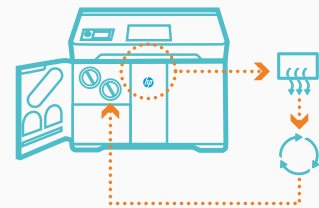Insert 3D materials and agent cartridges into the printer as needed.

Agents
Material

5 Automated material mixing and loading:
The printer automatically mixes fresh and reusable material and loads it into the print area. Agents are automatically loaded into the print area as well.

Material mixing
Fresh material
Reusable material
Agents

6 Print with voxel-level control:
Press "Start" to begin printing with fine detail and high dimensional accuracy, thanks to HP's multi-agent printing process.
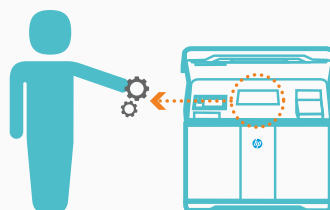
Detailing
Fusing
Material
Agents
Fused
Energy

7 Automated material extraction and reclamation:
After printing is finished, the printer automatically extracts and reclaims unfused material for future builds. You can use up to 80% reusable material in builds while maintaining consistent performance.[*]

8 Job done:
You receive an alert when your parts are ready and the reclamation process is complete.

9 Retrieve parts:
Simply open the printer and retrieve your parts for final cleaning and post processing.

10 HP Jet Fusion 3D Solution Services – with you at every step:
Accelerate your design cycle with immediate access to support, affordable solution services, and comprehensive training.

[*] HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability CB PA 12 provide up to 80% powder reusability ratio producing functional parts batch after batch.
For testing, material is aged in real printing conditions and powder is tracked by generations (worst case for reusability). Parts are then made from each generation and tested for mechanical properties and accuracy.

Technical information

HP Jet Fusion 540 3D Printer

Printer performance	Technology	HP Multi Jet Fusion technology
	Effective building volume	Up to 332 x 190 x 248 mm (13.1 x 7.5 x 9.8 inches)
	Building speed[2]	1,817 cm³/hr (111 in³/hr)
	Full build job time for 248-mm (9.8-in) buildable height	As fast as 14 hours: Fast Cool and Reclaim profile[3] As fast as 20 hours: Auto Cool and Reclaim profile[4]
	Layer thickness	0.08 mm (0.003 inches)
	Printhead resolution	1200 dpi
Dimensions (w x d x h)	Printer	1565 x 955 x 1505 mm (61.6 x 37.6 x 59.3 inches)
	Shipping	1770 x 1143 x 2013 mm (69.7 x 45 x 79.3 inches)
	Operating area	2785 x 2530 x 2440 mm (109.6 x 99.3 x 96 inches)
Weight	Printing	650 kg (1433 lb)
	Shipping	850 kg (1874 lb)
Environmental ranges	Operating temperature	20-30° C (68-86° F)
	Operating humidity	20-70% RH without condensation
Acoustics[5]	Front operating position	72 dB (without muffler) / 70 dB (with muffler)
	Rear bystander position	80 dB (without muffler) / 75 dB (with muffler)
Network[6]		Gigabit Ethernet (10/100/1000Base-T), supporting the following standards: TCP/IP, DHCP (iPv4 only), TLS/SSL)
Hard disk		HDD 1TB (AES-256 encrypted, disk wipe DoD 5520M) & SSD 1TB (AES-256 encrypted)
Software	Included software	HP SmartStream 3D Build Manager
		HP SmartStream 3D Command Center
	Supported file formats	3MF, STL, OBJ, VRML v.2
Power	Consumption	6300W
	Requirements	One dedicated circuit configuration: input voltage 221 - 240 V, 32 A or 200 - 220 V, 36 A, 50/60 Hz
Certification & Statement	Safety	NA (US & Canada): IEC 61010-1 compliant, NRTL certified; EU: Machinery Directive, EN 61010-1, EN 60204-1, EN ISO 12100 and EN ISO 13849-1 compliant
	Electromagnetic compatibility	EN 55032:2012 Class A; CISPR 32:2015 Class A; FCC CFR 47 Part 15 Class A; ICES-003, Issue 6 Class A; EN 61000-3-12:2011; IEC 61000-3-12:2011; EN 61000-3-11:2017; IEC 61000-3-11:2017; EN 55024:2010; CISPR 24:2010
	Environmental statement	REACH compliant
Warranty & service coverage included		One-year limited hardware warranty

Eco Highlights

- Cleaner, more comfortable experience—enclosed printing system, and automatic powder management[7]
- Minimizes waste due to industry-leading reusability of powder[8]
- Take-back program for eligible supplies available in select countries [9]

Please recycle printing hardware and eligible printing supplies.
Find out how at our website: hp.com/ecosolutions

Dynamic security enabled printer. Only intended to be used with cartridges using an HP original chip. Cartridges using a non-HP chip may not work, and those that work today may not work in the future. More at: hp.com/go/learnaboutsupplies

Ordering information

Printer	M2K86A	HP Jet Fusion 540 3D Printer
Printer accessories	5RD52A	HP Jet Fusion Muffler
Recommended post-processing solution	Guyson MultiBlast3D	HP recommended bead and air blast solution[10] (Recommended for EMEA and AMS regions)
Recommended printer cleaning accessories	Delfin 300 BL	HP recommended explosion-proof vacuum.[10] (Recommended for EMEA region)
	Tiger-Vac C-10 EX (4W) HP2	HP recommended explosion-proof vacuum.[10] (Recommended for AMS region)
Original HP printheads	V1Q67A	HP 3D400 Printhead Kit
Original HP agents	V1Q80A	HP 3D400 500-ml Detailing Agent
	V1Q71A	HP 3D400 500-ml Fusing Agent
	V1Q81A	HP 3D400 250-ml Bright Fusing Agent
Original HP 3D high reusability materials	V1R30A	HP 3D HR CB PA 12 10L (4 kg)[11]
HP Jet Fusion 3D Solution Services	U9ZR4E	HP Ready-to-print Service for HP Jet Fusion 500/300 Series 3D Printers
	U9ZN9E	HP Advanced Operation Training Service for HP Jet Fusion 500/300 Series 3D Printers (HP Training Center)
*Defective Media Retention	U9ZQ7E	HP 3 Year 2nd Business Day Onsite HW Support with DMR* Foundation Care for HP Jet Fusion 540 3D Printer
HP 3D long-term consumables	8WA27A	HP Jet Fusion 500/300 Series 3D Printer Air Inlet Filter
	8WA28A	HP Jet Fusion 500/300 Series 3D Printer Print Area Filter
	8WA29A	HP Jet Fusion 500/300 Series 3D Printer Air Exhaust Filter
	8WA30A	HP Jet Fusion 500/300 Series 3D Printhead Cleaning Roll
	8WA31A	HP Jet Fusion 500/300 Series 3D Printer Lamp Module

reddot award 2018 winner

HP Jet Fusion 500 Series 3D Printers were awarded the "Seal of Design Quality" at the 2018 Red Dot Awards, an honor that is only awarded to products that display outstanding design quality and innovation.

Connect with an HP 3D Printing expert or sign up for the latest news about HP Jet Fusion 500 Series 3D Printers at hp.com/go/3DPrinter540

Learn more about HP Multi Jet Fusion technology at hp.com/go/3DPrint

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1. Based on internal and third-party testing for HP Jet Fusion 580 Color and 540 3D Printers, printing and cooling time is a fraction of the time of the printing times of comparable plastic fused deposition modeling (FDM), stereolithography (SLA), and material jetting solutions from $20,000 USD to $120,000 USD on market as of July, 2019. Testing variables for the HP Jet Fusion 580 Color and 540 3D Printer: Part quantity: 1 full build chamber of parts from HP Jet Fusion 3D at 8% of packing density versus same number of parts on above-mentioned competitive devices; Part size: 30 cm³; Layer thickness: 0.08 mm/0.003 inches. Competitor testing variables are comparable.
2. Based on 0.08-mm (0.003-in) layer thickness and 10 sec/layer.
3. Assumes "Fast Cool and Reclaim" print mode. Job duration begins at the moment the job is selected to print at the control panel and ends at the time the parts are ready to be removed from the build chamber. Does not include part cleaning.
4. Assumes default "Auto Cool and Reclaim" print mode. Job duration begins at the moment the job is selected to print at the control panel and ends at the time the parts are ready to be removed from the build chamber. Does not include part cleaning.
5. Measurement positions conform to ISO 11201-2010 for machinery, 1.0 meters horizontally and 1.55 meters above the floor.
6. The HP Jet Fusion 3D Printing Solution should be connected to the HP Cloud in order to enable the correct functioning of the printer and to offer better support.
7. Compared to manual print retrieval process used by other powder-based technologies. The term "cleaner" does not refer to any indoor air quality requirements and/or consider related air quality regulations or testing that may be applicable.
8. Compared to PA 12 materials available as of June, 2017. HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability CB PA 12 provide up to 80% powder reusability ratio, producing functional parts batch after batch.
9. Printing supplies eligible for recycling vary by supply and by printer. Visit hp.com/recycle to see how to participate and for HP Planet Partners program availability; program may not be available in your area. Where this program is not available, and for other consumables not included in the program, consult your local waste authorities on appropriate disposal.
10. Please consult with your local HP Partner First 3D Printing Specialist.
11. Liters refers to the materials container size and not the actual materials volume. Materials are measured in kilograms.