

# HP Jet Fusion 5600 Series

## 3D printing solutions



# HP Jet Fusion 5600 Series 3D printing solutions

Enhance your manufacturing capabilities and optimize applications for flexible production at scale<sup>1</sup>

Ideal for high volume production environments



## Gain process flexibility to enhance applications<sup>2</sup>

- Optimize applications for scalable production with access to process development capabilities
- Leverage data and KPI analytics that streamline application development
- Become your own process expert through the transfer of knowledge and support from HP's technical experts

## Save time and money with predictable manufacturing<sup>3</sup>

- Improve yield rates and help reduce costs with optimized print modes and calibrations for consistent part quality—part to part, build to build, system to system
- Build confidence in your production processes with access to data reports
- Reduce unplanned downtime through improved hardware reliability

## Grow your business by scaling AM production

- Produce robust final parts with best-in-class isotropy using our latest generation HP Jet Fusion platform
- Maximize overall equipment effectiveness (OEE) through enhanced part repeatability and system reliability
- Unlock MJF's highest process capabilities to optimize and scale applications

HP 3D hardware, software, and services designed to help you scale into volume production



# HP Digital Production Suite—delivering the science and power of HP Multi Jet Fusion technology

HP Digital Production Suite provides the control and analytics required to scale additive manufacturing for a complete supply chain solution.

Design

Development

Production

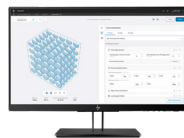


Design

Development

Production

HP 3D  
Process  
Development







Expand HP Multi Jet Fusion applications with access to a full suite of process parameter settings. Experiment and create processes designed to scale. Maintain a library with your testing procedures.

Design

Development

Production

HP 3D Build Manager	HP 3D Command Center	HP 3D Center
		
<p>Quickly and easily prepare your jobs for printing with all the elements you need</p>	<p>Client/server application for system setup, registration, device monitoring, and connectivity management</p>	<p>Cloud-based dashboard delivers timely and historical data for greater productivity and efficiency</p>

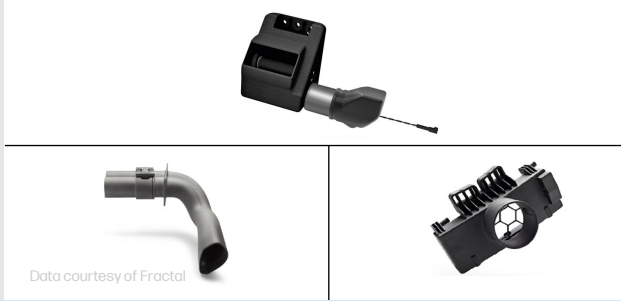
Integration with industry-leading software partners			
			

# The HP Jet Fusion 5600 Series 3D printing solution is currently available with the following materials:

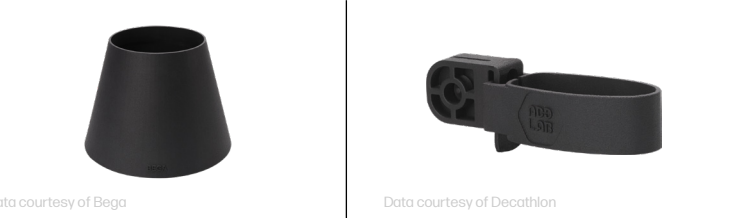
## HP 3D High Reusability PA12, enabled by Evonik. Strong, low-cost<sup>4</sup> parts and a reduced carbon footprint<sup>5</sup>

Reduce total cost of ownership<sup>6</sup> and produce strong, functional, detailed complex parts with HP 3D High Reusability PA 12, enabled by Evonik. This robust thermoplastic provides industry-leading surplus powder reusability.<sup>7</sup>

Statements: Biocompatibility, REACH, RoHS (for EU, Bosnia-Herzegovina, China, India, Japan, Jordan, Korea, Serbia, Singapore, Turkey, Ukraine, Vietnam), PAHs, Statement of Composition for Toy Applications, UL 94, and UL 746A. Meets strict automotive safety standards, including the Federal Motor Vehicle Safety Standard (FMVSS).<sup>8</sup>



## HP 3D High Reusability PA 12 S, enabled by Arkema



Ideal for customers that need to produce premium surface parts with lower variable costs,<sup>9</sup> while minimizing waste through high reusability,<sup>10</sup> leading to reduced environmental impact.

## HP 3D High Reusability PA 12 W – Engineering-grade parts for vibrant color applications.

Produce complex parts with fine detail, dimensional accuracy, optimal mechanical properties, and with industry-leading surplus powder reusability.<sup>23</sup>

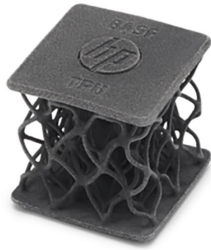
Designed to enhance color versatility, manufacturing equipment flexibility and reduce post-processing costs with UV resistance. Ideal for part providers and OEMs in industrial, orthotics and prosthetics and consumer goods sectors who want to dye parts in bright colors.



# BASF Ultrasint® TPU01: flexible, functional parts



Data courtesy of HP - BASF



Data courtesy of HP - BASF

Produce flexible TPU parts, with a high throughput, excellent quality and level of detail, and suitable for a wide range of applications. Ideal for parts requiring shock absorption, energy return, and flexibility.



Tested and approved solely for compatibility with HP Jet Fusion 3D printers

## Working together through your digital manufacturing journey: HP 3D Solution Services



Whether you're just starting out or you're in full production, we're here to help you successfully navigate your 3D printing adoption journey with a world-class service experience, dedicated to making digital manufacturing and new growth a reality for your business.

### HP 3D Printing Prepare Services

From preparing your site to installing and calibrating your equipment; and printing your first parts to helping you explore the full potential of HP 3D Printing, we'll help get you started on the right track with HP 3D Printing Prepare Services.

### HP 3D Printing Care Services

Your uptime is our top priority. From preventive maintenance to proactive, big data-driven analytics, we're looking for every opportunity to help you improve the return on your investment through HP 3D Printing Care Services.

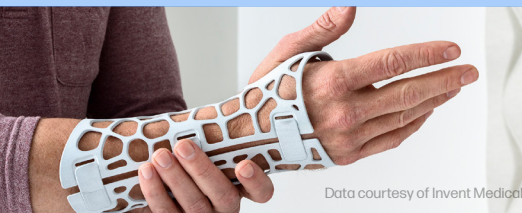
### HP 3D Printing Grow Services

Accelerate your transformation with HP 3D Printing Grow Services, designed to help you grow, move into new materials, applications, and use cases, and further optimize your manufacturing processes.

Learn more: [hp.com/go/3DSupport](http://hp.com/go/3DSupport)

## HP 3D Professional Services: Accelerate your transformation to additive manufacturing (AM)

HP 3D Professional Services help organizations identify viable strategic opportunities, optimize design for breakthrough applications, and streamline manufacturing processes to enable mass customization and scale production.



Data courtesy of Invent Medical



Data courtesy of Addition



### Adopt

Identify new opportunities and advanced design techniques enabled with HP Multi Jet Fusion technology.

HP Jet Fusion 5600 Series 3D printing solutions

### Develop

Look to improve your product positioning and market differentiation through innovation and new application development.

### Manufacture

Set up customized, repeatable, and scalable manufacturing processes with HP 3D Factory Services.

Learn more: [hp.com/go/3DProfessionalServices](http://hp.com/go/3DProfessionalServices)  
Learn more: [hp.com/go/FactoryServices](http://hp.com/go/FactoryServices)



## Accelerate your move to HP 3D Printing with HP Integrated Financial Solutions

Leverage the latest technology to help accelerate your growth, profitability, and competitiveness. Partner with HP Integrated Financial Solutions to help accelerate your time to value. Enjoy the flexibility to meet both your technology and financial plans while allocating your cash to other priorities.

Financing options include a low per-month payment for HP Jet Fusion 5600 Series 3D printing solutions, enabling the flexibility to:

- Avoid a large upfront payment
- Align payments with revenue by using deferred or step payment options
- Simplify your administration—bundle hardware and services into a single agreement
- Change as your requirements evolve; refresh every 3–5 years

Financing and service offerings are available through Hewlett-Packard Financial Services Company and its subsidiaries and affiliates (collectively HPFSC), in certain countries, and are subject to credit approval and execution of standard HPFSC documentation. Rates and terms are based on customer's credit rating, offering types, services, and/or equipment type and options. Not all customers may qualify. Not all services or offers are available in all countries. Other restrictions may apply. HPFSC reserves the right to change or cancel this program at any time without notice.

Learn more: [hp.com/go/3DIntegratedFinancialSolutions](http://hp.com/go/3DIntegratedFinancialSolutions)

## HP 3D as a Service (HP 3DaaS)<sup>11</sup>: Gain new levels of cost predictability with the flexibility to scale your business as you grow

In this business climate, there are many advantages to a pay-as-you-go business model when the focus is on outcomes. Paying on a usage basis puts the focus on your business results rather than equipment or transactions.

HP Jet Fusion 3D printing solutions are reinventing design and manufacturing—from accelerating design cycles to running efficient volume production with repeatable part quality.

Speed up your digital manufacturing transformation with HP 3DaaS:

- **Predictable:** Usage-based price per successful build<sup>12</sup> gives you certainty around your variable costs
- **Convenient:** Gain new operational efficiencies by simplifying supplies ordering and inventory management
- **Affordable:** Avoid up-front investment and help align your costs directly with your revenue by paying monthly<sup>13</sup>

HP 3DaaS includes:

- HP 3D Printing Care Services: HP 3D Production Care or HP 3D Shared Care
- HP Supplies and Automatic Replenishment<sup>11</sup>
- HP 3D Preventive Maintenance Kits
- Online dashboard for convenient billing and usage tracking

Contact your local HP sales representative for more information or learn more at [hp.com/go/3DaaS](http://hp.com/go/3DaaS)

# Technical specifications

## HP Jet Fusion 5600 Series 3D printers

PRINTER PERFORMANCE	Technology	HP Multi Jet Fusion technology
	Effective build volume	380 x 284 x 380mm (15 x 11.2 x 15in)
	Humidity	40-80%
	Building speed <sup>14</sup>	Up to 3,466cm <sup>3</sup> /hr (211 in <sup>3</sup> /hr)
	Layer thickness <sup>14</sup>	0.09mm (.0035in)
	Job processing resolution (x,y)	1,200dpi
DIMENSIONS (W x D x H)	Printer	2,210 x 1,268 x 1,804mm (87 x 50 x 71in)
	Shipping	2,300 x 1,325 x 2,027mm (91 x 52 x 80in)
	Operating area	3,700 x 3,700 x 2,500mm (146 x 146 x 99in)
WEIGHT	Printer	880kg (1,940lb)
	Build unit	140.5kg (309.7lb)
	Shipping	1,037.5kg (2,287lb)
NETWORK <sup>15</sup>	Gigabit Ethernet (10/100/1000Base-T), supporting the following standards: TCP/IP, DHCP (IPv4 only), TLS/SSL	
PROCESSOR AND MEMORY	Processor	Intel® Core™ i7 7770 (3.6GHz, up to 4.2GHz)
	Memory	64GB DDR4
HARD DISK	1TB HDD SED (AES-256 encrypted)	
	1TB SDD SED (AES-256 encrypted), TGC-OPAL 2.01 compliant	
SOFTWARE	Compatible software	HP 3D Build Manager HP 3D Command Center HP 3D Center HP 3D API HP 3D Process Development
	Supported file formats	3MF, STL, OBJ, and VRML (v2.0)
	Certified third-party software	Autodesk® Netfabb with HP Workspace, Materialize Build Processor for HP Multi Jet Fusion technology, Siemens NX AM for HP Multi Jet Fusion technology
POWER	Consumption	12 kW <sup>16</sup>
	Requirements	380-415V (line-to-line), 50A max, 50/60Hz 200-240V (line-to-line), 80A max, 50/60Hz
CERTIFICATIONS AND STATEMENT	Safety	IEC 60950-1+A1+A2 compliant; United States and Canada (UL listed); EU (LVD and MD compliant, EN 60950-1, EN 12100-1, EN 60204-1, and EN 1010)
	Electromagnetic	Compliant with Class A requirements, including: USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM), Korea (KCC)
	Environmental statement	REACH compliant
WARRANTY & SERVICE COVERAGE INCLUDED	One-year limited hardware warranty	
ENVIRONMENTAL SPECIFICATIONS	Temperature during installation	20-30°C (68-86°F)
	Operating temperature	20-30°C (68-86°F)
	Recommended temperature for best performance	20-30°C (68-86°F)
	Storage temperature	-25 to 55°C (-13 to 131°F)
	Operating humidity	40-80% without condensation
	Storage humidity	< 90% without condensation
HP 3D Printing materials have their own restrictions published in material data sheets		

## HP Jet Fusion 5200 Series 3D processing stations

FEATURES	Automated mixing and loading with ultrasonic sieving and accessible sieve mesh; semi-manual unpacking; high-temperature unpacking; automated external storage tank; optional trained self-service deep-cleaning; optional cooling unit		
	DIMENSIONS (W x D x H)	Processing station	2,990 x 934 x 2,400mm (117.7 x 36.8 x 94.5in)
		Shipping	2,389 x 1,176 x 2,182mm (94 x 46.3 x 85.9 in)
	Operating area	3,190 x 2,434 x 2,500mm (125.6 x 95.8 x 99in)	
WEIGHT	Processing station	485kg (1,069lb)	
	Loaded	724kg (1,596lb)	
	Shipping	620kg (1,366lb)	
POWER	Consumption	2.6kW (typical)	
	Requirements	Input voltage single phase 200-240V (line-to-line) 19A max, 50/60Hz (line-to-neutral) 14A max, 50Hz	
CERTIFICATIONS AND STATEMENT	Safety	UL 2011, UL508A, NFPA 70/ NFPA 79, C22.2 NO. 14-13 compliant; United States and Canada (UL listed); EU (MD compliant, EN 60204-1, EN 12100-1, EN 1127-1, EN-ISO 11201 and EN 1010)	
	Electromagnetic	Compliant with Class A requirements, including USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM), Korea (KCC)	
	Environmental statement	REACH compliant	
WARRANTY & SERVICE COVERAGE INCLUDED	One-year limited hardware warranty		
ENVIRONMENTAL SPECIFICATIONS	Temperature during installation	20-30°C (68-86°F)	
	Operating temperature	20-30°C (68-86°F)	
	Recommended temperature for best performance	20-30°C (68-86°F)	
	Storage temperature	-25 to 55°C (-13 to 131°F)	
	Operating humidity	40-80% without condensation	
	Storage humidity	< 90% without condensation	
HP 3D Printing materials have their own restrictions published in material data sheets			

# Ordering information

PRINTER	7L1F1B	HP Jet Fusion 5600 3D Printer
ACCESSORIES	7Q9U6A	HP Jet Fusion 5600 3D Build Unit
	3FW27A	HP Jet Fusion 5200 3D Processing Station
	815Z7A	HP Jet Fusion 3D Automation Accessory
	2W883A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station
	2M7W6A	HP Jet Fusion 5200 Series 3D Automatic External Tank
	4QG11A	HP Jet Fusion 5200 3D Automatic External Tank Starter Kit
	4QG10A	HP Jet Fusion 5200 3D Natural Cooling Unit
	5ZR22A	HP Jet Fusion 5200 3D Natural Cooling Unit Starter Kit
	870A3A	HP Jet Fusion 5600 to 5620 Printer Upgrade Kit
	8Z084A	HP Jet Fusion 5620 to 5620 Pro Printer Upgrade Kit
	5ZR20A	HP Jet Fusion 5210 3D Processing Station Installation Kit
5ZR24A	HP Jet Fusion 5210 Pro 3D Processing Station Installation Kit	
HP JET FUSION 3D POWDER HANDLING AUTOMATION SOLUTION		Please contact your local HP 3D Printing specialist
HP PROCESS DEVELOPMENT PACKAGE		Please contact your local HP 3D Printing specialist
HP OFFICEJET PRO 9730 WIDE FORMAT ALL-IN-ONE PRINTER		For more information on availability in your region, please check with your local HP 3D Printing specialist
	7L4S2A	HP Jet Fusion 3D Alignment Plate Accessory
	7L4S1A	HP Jet Fusion 3D Thermocamera Calibration Tool
	3FW24A	HP Jet Fusion 3D Material Loading 3 units Bundle
	3WL35A	HP Jet Fusion 3D Material Unloading Kit
RECOMMENDED THIRD-PARTY ACCESSORIES	Hovmand Forklift 5200	Please consult with your local HP Amplify 3D printing specialist
ORIGINAL HP PRINTHEADS	F9K08A	HP 3D600 Printhead

HP 3D LONG-TERM CONSUMABLES	8VJ68A	HP Jet Fusion 5200/4200 Series 3D Vacuum Pump Filter
	2X0E1A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station E-cabinet Fan Filter
	2X0E2A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station Pneumatic Filter
	2X0E3A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station Top Lid Filter
ORIGINAL HP AGENTS	V1Q63A	HP 3D700 5L Fusing Agent
	V1Q64A	HP 3D700 5L Detailing Agent
OTHER SUPPLIES	V1Q66A	HP 3D600 Cleaning Roll
ORIGINAL HP 3D HIGH REUSABILITY MATERIALS <sup>17</sup>	V1R10A	HP 3D High Reusability PA 12, enabled by Evonik, 30L (13kg)
	V1R16A	HP 3D High Reusability PA 12, enabled by Evonik, 300L (130kg)
	V1R34A	HP 3D High Reusability PA 12, enabled by Evonik, Production Material 300L (130kg) <sup>18</sup>
	V1R20A	HP 3D High Reusability PA 12, enabled by Evonik, 1,400L (600kg) <sup>19,20</sup>
	910J7A**	HP 3D HR PA12 S enabled by Arkema 300L/170kg Material
	9V508A**	HP 3D HR PA12 S enabled by Arkema 1,220L/500kg Material
	300071	BASF Ultrasint® TPU01, 300L (150kg)
	300072	BASF Ultrasint® TPU01, 1,000L (500kg) <sup>22</sup>
	6M032A	HP 3D HR PA12 W 300L/130kg Production Material
	HP JET FUSION 3D SOLUTION SERVICES <sup>21</sup>	UB4P2E
	U67MQE	HP Ready-to-Print Service for HP Jet Fusion 5600 Series 3D printing solutions
	U67MSE	HP Ready-to-Grow Service for HP Jet Fusion 5600 Series 3D printing solutions
	UB9V8E	HP 3-year Next Business Day* Onsite HW Support w/DMR** Production Care for HP JF 5600/5200/4200 3D printer
	UB7M7E	HP 3-year Next Business Day* Onsite HW Support w/DMR** Foundation Care for HP JF 5600/5200/4200 3D printer
	H0JQ4AC	HP Shared Care Jet Fusion 5600 3D printer

\*Next Business Day

\*\*Defective Media Retention

# Note

Learn more about HP Multi Jet Fusion technology at: [hp.com/go/3DPrint](https://hp.com/go/3DPrint)

Connect with an HP 3D Printing expert or sign up for the latest news about HP Jet Fusion 3D Printing: [hp.com/go/3Dcontactus](https://hp.com/go/3Dcontactus)

For more information, please visit: [hp.com/JetFusion5600](https://hp.com/JetFusion5600)

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](https://hp.com/go/learnaboutsupplies).

1. The HP Jet Fusion 5600 Series 3D printing solution is currently available with HP 3D High Reusability PA 12, enabled by Evonik / HP 3D HR PA 12 S, enabled by Arkema / BASF Ultrasint® TPU01.
2. Customize the HP Multi Jet Fusion process to meet TCO or quality targets with the optional Process Development Package, which includes access to process parameter settings, analytics capabilities, and knowledge transfer. The Process Development Package is not included, sold separately.
3. Based on internal HP testing as of July 2023, comparing the HP Jet Fusion 5600 Series 3D printing solution with other printers in the HP Jet Fusion portfolio.
4. Based on internal testing and public data for solutions on market as of April, 2016. Cost analysis based on: standard solution configuration price, supplies price, and maintenance costs recommended by manufacturer. Cost criteria: printing 1.4 full build chambers of parts per day/5 days per week over 1 year of 30 cm<sup>3</sup> parts at 10% packing density on Fast print mode using HP 3D High Reusability PA 12, enabled by Evonik material, and the powder reusability ratio recommended by manufacturer, and printing under certain build conditions and part geometries.
5. Carbon footprint reduction calculated by Evonik.
6. Compared to selective laser sintering (SLS) and fused deposition modeling (FDM) technologies, HP Multi Jet Fusion technology can reduce the overall energy requirements needed to attain full fusing and reduce the system requirements for large, vacuum-sealed ovens. In addition, HP Multi Jet Fusion technology uses less heating power than SLS systems for better material properties and material reuse rates, minimizing waste.
7. Based on using recommended packing densities and compared to selective laser sintering (SLS) technology, offers excellent reusability without sacrificing mechanical performance. Tested according to ASTM D638, ASTM D256, ASTM D790, and ASTM D648 and using a 3D scanner. Testing monitored using statistical process controls.
8. This product is certified for Federal Motor Vehicle Safety Standard (FMVSS) 302 for Flammability of Interior Materials—Passenger Cars, Multipurpose Passenger Vehicles, Trucks, and Buses.
9. Cost analysis based on standard solution configuration price, supplies price, and maintenance costs recommended by HP, comparing HP 3D HR PA12, enabled by Evonik and HP 3D HR PA12 S, enabled by Arkema (both using Balanced print mode) and power reusability recommended by HP. Cost criteria: printing 5 full builds per week, 220 working days per year, 36cc part volume, 7% packing density, and 80 parts per build.
10. HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability PA 12 S, enabled by Arkema, provide up to 85% 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.
11. HP Supplies and Automatic Replenishment is currently available in the US, Canada, Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Poland, Portugal, Spain, Sweden, UK, and South Korea. HP 3DaaS service only (HP Supplies not included) is available in Mexico, Brazil, Israel, Hungary, Romania, Slovenia, Turkey, United Arab Emirates, Greece, South Africa, China, Singapore, and Taiwan.
12. A successful build is a printed job that ends with the exit code "job\_completed\_successfully."
13. HP 3DaaS defined usage-based price applies for a one-year term.
14. Based on using HP 3D High Reusability PA 12, enabled by Evonik, Balanced Print mode, at 0.09mm (0.0035in) layer thickness. Faster times are achievable with HP 3D Process Development.
15. 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.
16. PA 12 in Balanced print mode.
17. Liters refers to the materials container size and not the actual materials volume. Materials are measured in kilograms.
18. Compatible with the HP Jet Fusion 5620 pro/5620 3D printing solutions.
19. Compatible with the HP Jet Fusion 5620 Pro 3D printing solution.
20. Additional material management equipment is required.
21. Should the HP Jet Fusion 3D printer or printing solution alert you that preventive maintenance is required, you must purchase the kit separately if you do not have one or if the kit provided was already used. If preventive maintenance is not completed in a timely manner, HP may request that you take corrective actions. HP may charge any extra costs due to the lack of maintenance. Required only if under HP 3D Foundation Care.
22. Only compatible with the HP Jet Fusion 5210 Pro 3D Printing Solution.
23. Based on using recommended packing densities and compared to selective laser sintering (SLS) technology, offers excellent reusability without sacrificing mechanical performance. Tested according to ASTM D638, ASTM D256, ASTM D790, and ASTM D648 and using a 3D scanner. Testing monitored using statistical process controls.

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