HP Jet Fusion 4200 3D Printing Solution





Quality, functional parts

- Ideal for industrial prototyping and final part production.
- Achieve predictable print time and parts with best-in-class isotropy.
- Choose between print modes tuned for mechanical/functional/ aesthetic properties, accuracy, and speed.

Optimized productivity

- Produce more parts per day with continuous printing.¹
- Streamlined, cleaner experience with enclosed, automated mixing.²
- Rely on HP's world-class HP 3D Solution Services to maximize uptime and productivity.

Optimized costs

- Reduce operational costs, opening your doors to short-run production.
- Invest in a competitively priced 3D printing solution and produce at a low cost per part.
- Optimize cost and part quality, with cost-efficient materials that offer industry-leading reusability.³

HP Jet Fusion 4200 3D Printing Solution

Produce quality parts while optimizing productivity and cost Ideal for industrial prototyping and final part production environments



of reused material from the processing station so it can be replaced with a different material

Automated materials mixing and loading systems

help streamline your workflow and reduce labor time



Expanding materials and applicationsnew growth opportunities

Expand into new applications and markets with a growing portfolio of HP 3D materials that enable you to produce a variety of low-cost, quality parts—and address sustainability objectives with industry-leading reusability.³

HP 3D High Reusability PA 11—ductile,¹⁰ quality parts

Produce functional parts with impact resistance and ductility.¹⁰ This thermoplastic material, made from renewable sources,¹¹ provides optimal mechanical properties and consistent performance at industry-leading surplus powder reusability.³

Statements:¹² 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



HP 3D High Reusability PA 12—strong, low-cost,¹³ quality parts

Reduce total cost of ownership¹⁴ and produce strong, functional, detailed complex parts with HP 3D High Reusability PA 12, a robust thermoplastic that enables industry-leading surplus powder reusability.³

Statements:¹² 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



HP 3D High Reusability PA 12 Glass Beads—stiff, dimensionally stable, quality parts

Produce stiff, functional parts—while achieving up to 70% surplus powder reusability¹⁵—with this glass bead filled thermoplastic material ideal for applications requiring high stiffness and dimensional stability like enclosures and housings, fixtures and tooling.

Statements:¹² REACH, RoHS (for EU, Bosnia-Herzegovina, China, India, Japan, Jordan, Korea, Serbia, Singapore, Turkey, Ukraine, Vietnam), PAHs, UL 94 and UL 746A



HP 3D High Reusability TPA enabled by Evonik

Produce flexible and lightweight¹⁶ parts with enhanced rebound resilience with this easy-to-process elastomer, with high part uniformity.

Statements:¹² REACH, RoHS (for EU, Bosnia-Herzegovina, China, India, Japan, Jordan, Korea, Serbia, Singapore, Turkey, Ukraine, Vietnam), PAHs



Data courtesy of GoProto Inc. Printed with HP 3D High Reusability TPA enabled by Evonik



Material Certified for HP Jet Fusion 3D Printing



Data courtesy o HP - Lubrizol

ESTANE® 3D TPU M95A is an ideal fit for both prototyping and manufacturing scale-up applications, delivering high energy rebound, high-impact absorption, a good abrasion resistance rate and high elasticity, combined with excellent unpacking/depowdering properties.



Tested and approved solely for compatibility with HP Jet Fusion 3D printers¹⁷

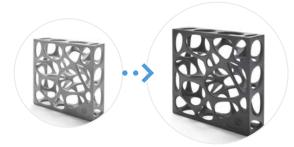
HP 3D Printing materials portfolio selection guide¹⁸

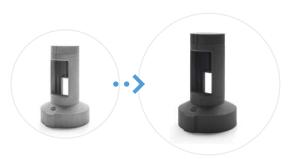
	HP 3D HR PA 11	HP 3D HR PA 12	HP 3D HR PA 12 GB	HP 3D HR TPA enabled by Evonik	ESTANE [®] 3D TPU M95A
Stiffness	•	•	*	A	A
Impact resistance	•	1.1	A	*	*
Elongation	•		A	*	*
Dimensional capability	•	*	•		
Level of detail	*	•	•	•	
Flat part		•	*	10 A 10	
Temperature resistance	A	1.1	•	1.1	•
Chemical resistance ¹⁹	•	•	n/a	A	•
Low moisture absortion	A				•
Lightweight	•	•		● ¹⁶	A
For more information, visit:		*	•		•
hp.com/go/3Dmaterials		Best	Good	Fair	Not recommended

HP recommended post-processing solutions

Girbau DY130 Dyeing Solution²⁰

With 50 years of experience designing industrial equipment and in the dyeing equipment industry, Girbau offers a post-processing solution for dye finishing made for the HP Jet Fusion 4200 3D Printing Solution.²⁰





For more information, visit: coloringsystem.girbau.com

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 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 at hp.com/go/3DSupport

HP 3D Professional Services accelerate your transformation to additive manufacturing (AM)

Learn more at: hp.com/go/3DProfessionalServices

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.



Adopt

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



Develop

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



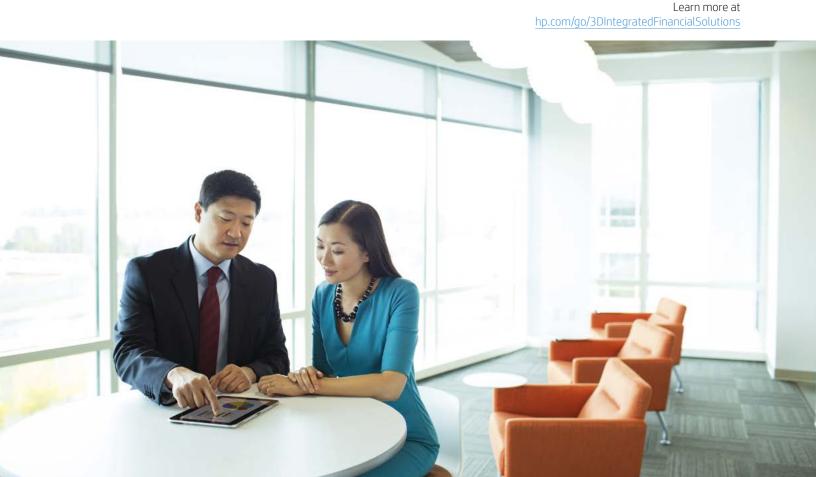
Manufacture Optimize production processes through your additive manufacturing transformation journey.

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 the HP Jet Fusion 4200 3D Printing Solution, enabling the flexibility to:

- Avoid a large up-front 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 available through Hewlett-Packard Financial Services Company and its subsidiaries and affiliates (collectively HPFSC) in certain countries and is 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.



HP 3D as a Service (HP 3DaaS)⁶— 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. Capital expenses are transformed into operating expenses, spread over time. 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 build²¹ 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 monthly²²

HP 3DaaS Base includes:

- Automatic replenishment of HP 3D supplies
- HP 3D Printing Care Services, including remote and on-site support
- Online dashboard for easy, convenient tracking of billing and usage

Contact your local HP sales representative for more information or learn more at <u>hp.com/go/3DaaS</u>



Technical specifications

HP Jet Fusion 4200 3D Printer

Printer	Technology	HP Multi Jet Fusion technology	
performance	Effective building volume	380 x 284 x 380 mm (15 x 11.2 x 15 in)	
	Building speed ²³	Up to 4115 cm ³ /hr (251 in ³ /hr)	
	Layer thickness	0.08 mm (0.003 in)	
	Job processing resolution (x, y)	600 dpi	
	Print resolution (x, y)	1200 dpi	
Dimensions (w x d x h)	Printer	2210 x 1200 x 1448 mm (87 x 47 x 57 in)	
	Shipping	2300 x 1325 x 2068 mm (91 x 52 x 81 in)	
	Operating area	3700 x 3700 x 2500 mm (146 x 146 x 99 in)	
Weight	Printer	750 kg (1653 lb)	
	Shipping	945 kg (2083 lb)	
Network ²⁴	Gigabit Ethernet (10/100/1000Base-T), supporting th following standards: TCP/IP, DHCP (IPv4 only), TLS/SS		
Processor and memory	Processor	Intel® Core™ i7 4770TE (2.3 GHz, up to 3.3 GHz)	
	Memory	16 GB DDR3	
Hard disk	2TB (AES-256 encrypted, FIPS 140, disk wipe DoD 5220M)		
Software	HP SmartStream 3D Build Manager, HP SmartStream 3D Command Center		
	Compatible software	HP 3D API, ⁷ Center, ⁸ HP Universal Build Manager powered by Dyndrite ⁹	
	Supported file formats	3MF, STL, OBJ, and VRML (v2.0)	
	Certified third- party software	Autodesk [®] Netfabb [®] with HP Work- space, Materialise Build Processor for HP Multi Jet Fusion technology, Siemens NX AM for HP Multi Jet Fusion technology	
Power	Consumption	9 to 11 kW (typical)	
	Requirements	Input voltage three phase 380-415 V (line-to-line), 30 A max, 50/60 Hz 200-240 V (line-to-line), 48 A max, 50/60 Hz	
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)	
	Environmental statement	REACH	
Warranty & service coverage included	One-year limited h	ardware warranty	

HP Jet Fusion 4200 3D Processing Station with Fast Cooling

Features	Automated mixing, sieving, and loading; semi-manual unpacking; fast cooling; external storage tank		
Dimensions (w x d x h)	Processing station with fast cooling	2990 x 934 x 2400 mm (117.7 x 36.8 x 94.5 in)	
	Shipping	3499 x 1176 x 2180 mm (137.8 x 46.3 x 85.8 in)	
	Operating area	3190 x 2434 x 2500 mm (125.6 x 95.8 x 99 in)	
Weight	Processing station with fast cooling	480 kg (1058 lb)	
	Loaded	810 kg (1786 lb)	
	Shipping	620 kg (1367 lb)	
Power	Consumption	2.6 kW (typical)	
	Requirements	Input voltage single phase 200-240 V (line-to-line), 19 A max, 50/60 Hz or 220-240 V (line-to-neutral), 14 A max, 50 Hz	
Certifications and statement	Safety	UL 2011, UL508A, NFPA, C22.2 NO. 13-14 compliant; United States and Canada (UL listed); EU (MD compliant, EN 60204-1, EN 12100- 1 and EN 1010)	
	Electromagnetic	Compliant with Class A requirements, including: USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM)	
	Environmental statement	REACH	
Warranty & service coverage included	One-year limited hardware warranty		

Ordering information

Printer	M0P44B	HP Jet Fusion 4200 3D Printer
Accessories	MOP49C	HP Jet Fusion 4200 3D Processing Station with Fast Cooling
	M0P45B	HP Jet Fusion 4200 3D Build Unit
	MOP54B	HP Jet Fusion 5200/4200 Series 3D External Tank 5-units Bundle
	MOP54D	HP Jet Fusion 4200 Series 3D External Tank Starter Kit
Recommended accessories	Girbau DY130 Dyeing Solution ²⁰	Please consult with your local HP Amplify 3D Printing Specialist
Original HP printheads	F9K08A	HP 3D600 Printhead
Original HP	V1Q63A	HP 3D700 5L Fusing Agent
agents	V1Q64A	HP 3D700 5L Detailing Agent
Other supplies	V1Q66A	HP 3D600 Cleaning Roll
Original HP 3D high reusability	V1R10A	HP 3D High Reusability PA 12 30L (13 kg)
materials ²⁵	V1R16A	HP 3D High Reusability PA 12 300L (130 kg)
	V1R12A	HP 3D High Reusability PA 11 30L (14 kg)
	V1R18A	HP 3D High Reusability PA 11 300L (140 kg)
	V1R11A	HP 3D High Reusability PA 12 Glass Beads 30L (15 kg)
	V1R22A	HP 3D High Reusability PA 12 Glass Beads 300L (150 kg)
	V1R38A	HP 3D High Reusability TPA enabled by Evonik 300L (120 kg) Material
	V1R39A	HP 3D High Reusability TPA enabled by Evonik 300L (120 kg) Production Material ²⁶

Materials	3DTW0030	ESTANE [®] 3D TPU M95A 30L (16 kg)
Certified for HP Jet Fusion 3D	3DTW0300	ESTANE [®] 3D TPU M95A 300L (160 kg)
Printing ¹⁷	3DTW0900	ESTANE [®] 3D TPU M95A-545 900L (480 kg)
HP 3D Solution Services ²⁷	UB4P2E	HP Digital Manufacturing Site Readiness Assessment Tier 1 Service for HP Jet Fusion 5200/4200 Series 3D Printing Solutions
	U9ZS7E	HP 3D Ready-to-Print Service for HP Jet Fusion 4200 Series 3D Printing Solutions
	U9EK7E	HP 3D Advanced Operation Training Service (HP Training Center) for HP Jet Fusion 4200 Series 3D Printing Solutions
	UC0E9E	HP 3D Part Quality Proficiency Training Service for HP Jet Fusion 4200 Series 3D Printing Solutions
	UB9V8E	HP 3 Year NBD* On-site HW Support with DMR** Production Care for HP Jet Fusion 5200/4200 Series 3D Printer
	UB9X6E	HP 3 Year NBD* On-site HW Support Production Care for HP Jet Fusion 5200/4200 Series 3D Build Unit
*Next Business Day **Defective Media Retention	UB7R3E	HP 3 Year NBD* On-site HW Support Foundation and Production Care for HP Jet Fusion 5200/4200 Series 3D Processing Station
	UB4R1E	HP Customer Self-Repair Uptime Kit Service for HP Jet Fusion 4200 Series 3D Printing Solutions





Cofinanced Project by Minetur -SETSI TSI-100802-2014-1

For more information, please visit:

hp.com/go/3DPrinter4200

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.

Learn more about HP Multi Jet Fusion technology at: 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

- Continuous printing requires an additional HP Jet Fusion 3D build unit (standard printer configuration 1.
- includes one HP Jet Fusion 3D build unit).
- Compared to manual print retrieval process used by other powder-based technologies. The term 2. "cleaner" does not refer to any indoor air quality requirements and/or consider related air quality regulations or testing that may be applicable
- Industry-leading surplus powder reusability based on using HP 3D High Reusability PA 11 and PA 3. 12 at 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.
- For advanced data features, charges may apply in the future. 4
- Available in most countries, subject to Terms & Conditions of HP Limited Warranty and/or Service 5 Agreement. Please consult your local sales representative.
- HP 3DaaS Base is currently available in the US, Canada, Austria, Belgium, Denmark, Finland, 6. France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and UK. Includes support and maintenance services, supplies and long-term consumables.
- 7. Supported industrial management systems: 3D Control Systems, AMFG, LINK3D, Siemens NX AM, Siemens Opcenter. Access to additional data modules available only for the HP Jet Fusion 5200 Series 3D Printing Solution. Additional purchases required.
- Compatible software. Additional purchase required. Compatible software. Additional purchase required. 8
- Testing according to ASTM D638, ASTM D256, and ASTM D648 using HDT at different loads with a 10. 3D scanner for dimensional accuracy. Testing monitored using statistical process controls.
- HP 3D High Reusability PA 11 powder is made with 100% renewable carbon content derived from castor plants grown without GMOs in arid areas that do not compete with food crops. HP 3D High Reusability PA 11 is made using renewable sources, and may be made together with certain nonrenewable sources. A renewable resource is a natural organic resource that can be renewed at the same speed in which it is consumed. Renewable stands for the number of carbon atoms in the chain
- coming from renewable sources (in this case, castor seeds) according to ASTM D6866 For more information, see <u>hp.com/go/statementsPA11, hp.com/go/stat</u> hp.com/go/statementsPA12, 12. For hp.com/go/statementsPA12GB, and hp.com/go/statementsTPAEVONK. 13. 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 cm³ parts at 10% packing density on Fast print mode using HP 3D High Reusability PA 12 material, and the powder reusability ratio recommended by manufacturer, and printing under certain build conditions and part geometries.
- 14. 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
- 15. HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability PA 12 Glass Beads provide up to 70% 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.
- 16. Based on published specifications as of September, 2020. HP JetFusion 3D Printing Solutions using HP 3D High Reusability TPA enabled by Evonik provide up to 17% lower printed part weight when compared to common powder-based thermoplastic elastomers printed under similar conditions.
- Nothing herein should be construed as constituting an additional HP warranty. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services and/or in a written agreement between you and HP for such HP products

and services. HP believes that the information herein is correct based on the current state of scientific knowledge and as the date of its publication, however, to the maximum extent permitted by law HP EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF HP IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION PROVIDED. Except to the extent that exclusion is prevented by law, HP shall not be liable for technical or editorial errors or omissions contained herein and the information herein is subject to change without notice. HP shall not be liable for damages or losses of any kind or nature that result from the use of or reliance upon this information. The HP Jet Fusion 3D Materials have not been designed, manufactured or tested by HP for compliance with legal requirements for 3D printed parts and their uses and recipients are responsible for making their own determination as to the suitability of HP Jet Fusion 3D Materials for their purposes and uses, ensure compliance with applicable laws and regulations, and be aware that other safety or performance considerations may arise when using, handling or storing the product. Based on internal HP testing, March 2020. For testing methodology and results, see

- hp.com/go/3Dprintingmaterialswhitepapers. Please consult your local sales representative for more information
- 19. For HP 3D High Reusability PA 11 and PA 12, based on internal HP testing, June 2017. Tested with diluted alkalies, concentrated alkalies, chlorine salts, alcohol, ester, ethers, ketones, aliphatic hydrocarbons, unleaded petrol, motor oil, aromatic hydrocarbons, toluene, and DOT 3 brake fluid. 20. This product is only available in Europe and in the Americas. HP does not design, manufacture
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- 21. A successful build is a printed job that ends with the exit code "job_completed_successfully."
- HP 3DaaS Base defined usage-based price applies for a one-year term.
 Based on 0.08-mm (0.003-in) layer thickness and 7.55 sec/layer.
- 24. 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.
- Liters refers to the materials container size and not the actual materials volume. Materials are measured in kilograms.
- 26. Only compatible with the HP Jet Fusion 4210B 3D Printing Solution.
- 27. 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 vou take corrective actions, HP may charge any extra costs due to the lack of maintenance. Required only if under HP 3D Foundation Care.

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