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—enclosed, automated mixing—and materials not classified as health hazards.²
- Rely on HP's world-class HP Jet Fusion 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 industryleading 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

Easy-to-use solution that scales with your business; integrated end-to-end process that delivers both functional prototypes and final parts



HP 3D fusing and detailing agents work with HP Multi Jet Fusion technology and materials



to deliver quality, functional parts

Accurate thermal control of

every layer enables predictive

corrections voxel by voxel

HP Jet Fusion 4200 3D Printer



In-printer quality checks

reported via a touchscreen help minimize errors and enable easy and accurate job progress



Stay connected: 4 The HP Jet Fusion 3D Printing Solution collects data to provide a better customer and support experience; connectivity also drives both higher uptime and remote monitoring of your HP system from anywhere





HP 3D printing materials provide optimal output quality and high reusability at a low cost per part and include HP 3D High Reusability PA 12, HP 3D High Reusability PA 12 Glass Beads, and HP 3D High Reusability PA 11



Change to different materials: The HP Jet Fusion 3D external tank allows the extraction of recycled material from the processing station so it can be replaced with a different material



PRINTER



HP Jet Fusion 4200

with Fast Cooling

3D Processing Station

The HP Jet Fusion 3D build unit—included within the printer—is moved on for cooling right after job completion, allowing a continuous printing¹ process

No additional room for parts removal needed with enclosed unpacking and material **collection system,** including a laminar hood



Automated materials mixing and loading systems help streamline your workflow and reduce labor time

> The HP Jet Fusion 3D fast cooling **module** reduces cooling time resulting in fast time-to-part and more parts ready within the same day



HP Jet Fusion 3D Solution Services stand behind your business to maximize your uptime and productivity, with nextbusiness-day onsite support and spare parts



HP SmartStream 3D Build Manager:

quickly and easily prepare your jobs for printing with all the elements you need



HP 3D Center: track, manage, and optimize your 3D operations with software that provides remote, real-time monitoring; preventive notifications; and historical data analysis



Integration with industry-leading software solutions





SIEMENS

Autodesk® Netfabb® with Materialise Build Processor for HP Multi Jet Fusion technology

Siemens NX AM for HP Multi Jet Fusion technology

For more information, visit: hp.com/go/3DPrinter4200

New materials and applications—new 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,⁶ quality parts

Produce functional parts with impact resistance and ductility.⁶ This thermoplastic material, made from renewable sources,⁷ provides optimal mechanical properties and consistent performance at industry-leading surplus powder reusability.³

Certifications: Biocompatibility,[®] REACH, RoHS (for EU, Bosnia-Herzegovina, China, India, Japan, Jordan, Korea, Serbia, Singapore, Turkey, Ukraine, Vietnam), PAHs, Statement of Composition for Toy Applications



HP 3D High Reusability PA 12 Glass Beads—stiff, low-cost, quality parts

Produce stiff, functional parts with this 40% glass bead filled thermoplastic material offering both optimal mechanical properties and consistent performance—while achieving up to 70% surplus powder reusability¹¹—at a low cost per part.

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







Data courtesy of Bowman - Additive Producti

Data courtesy of OT4 Orthopädietechnik GmbH

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

Reduce total cost of ownership¹⁰ 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

Certifications: Biocompatibility, ⁸ 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 Certification





Data courtesy of Prometa3D

Materials Certified for HP Jet Fusion 3D Printing

HP is committed to expanding our portfolio of materials certified for HP Jet Fusion 3D Printing Solutions. Evonik's VESTOSINT® 3D Z2773 PA 12 is the first certified material. We're also working with a variety of other third-party vendors to increase the materials and application options available.

VESTOSINT® 3D Z2773 PA 12 30L (14 kg)¹² is a modified polyamide-based powder that is produced at Evonik's Marl site in Germany using the company's own special process. The powders are certified for the HP Jet Fusion 4200 3D Printer.¹³



HP 3D Printing materials portfolio selection guide

Usage and properties	HP 3D HR PA 11	HP 3D HR PA 12	HP 3D HR PA 12 GB	VESTOSINT® 3D Z2773 PA 12
Visual aids & presentation models	•	•	•	•
Functional prototyping	•	•	•	•
End-use parts	•	•	•	•
Dimensional stability	•	•	•	•
Functional rigid part (higher stiffness)	•	•	•	•
Ductile part (higher elongation at break)	•	•	•	•
Impact	•	•	•	•
HDT (heat deflection temperature)	•	•	•	•
Medical biocompatibility (USP Class I-VI and US FDA guidance for Intact Skin Surface Devices) ⁸	•	•	•	•
Look and feel	•	•	•	•
Powder reusability ratio for stable performance/total cost of ownership (TCO)	•	•	•	•

$\label{lem:formation} \textbf{For more information, visit:}$

hp.com/go/3Dmaterials

HP recommended post-processing solutions

Girbau DY130 Dyeing Solution15

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.¹⁵





In testing

For more information, visit: coloringsystem.girbau.com

Maximize your equipment uptime with **HP Jet Fusion 3D Solution Services**

Whether you're looking to meet today's needs or tomorrow's dreams, let HP help you get the most out of your 3D printing experience with a range of support offerings including foundational care and lifecycle support, training opportunities, and productivity services that bring ideas to life and speed your journey to full digital manufacturing.



HP 3D Printing Care Services



HP 3D Printing Lifecycle Services



HP 3D Printing Training Services



HP Digital Manufacturing Productivity Services

Drive business growth with high uptime and fast, efficient 3D printing. HP Jet Fusion 3D Solution Services can help your business in any capacity with foundational care services or lifecycle support, and advanced training. We help you do more and increase the return on your investment—from day one and as your needs evolve. Grow your business with true peace of mind.

- Speed your transformation to full digital manufacturing with the hands-on experience and guidance you get with HP Digital Manufacturing Productivity
- Empower your staff through **HP 3D Printing Training Services**, providing expert guidance on part design, print quality and yield, troubleshooting, and performance.
- Focus on your core business, while HP experts perform installations, upgrades, relocations, and more with HP 3D Printing Lifecycle Services.
- Prioritize uptime with next business day onsite support⁶ and next business day spare parts availability⁶ with **HP 3D Printing Care Services.**



Learn more at hp.com/go/3DPrinter4200

Accelerate your move to HP 3D Printing with HP Financial Services

Leverage the latest technology to help accelerate your growth, profitability, and competitiveness.

Partner with HP Financial Services 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

For more information, contact your HP or HP Financial Services representative.

> Learn more at hp.com/go/hpfinancialservices hp.com/go/3DPrinter4200

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.

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 ¹⁶	Up to 4115 cm³/hr (251 in³/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 ¹⁷	Gigabit Ethernet (10/100/1000Base-T), supporting the following standards: TCP/IP, DHCP (IPv4 only), TLS/SSL		
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 3D Center, HP SmartStream 3D Command Center		
	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	
Certification	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	REACH	
Warranty & service coverage included	One-year limited har	dware 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	
Certification	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	REACH	
Warranty & service coverage included	One-year limited hardware warranty		
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Eco Highlights



- HP 3D powders and agents are not classified as health hazards²
- Cleaner, more comfortable experience—enclosed printing system, and automatic powder management²
- · Minimizes waste due to industry-leading reusability of powder
- Take-back program for printheads18

Find out more about HP sustainable solutions at hp.com/ecosolutions

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

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.







Ordering information

Printer	M0P44B	HP Jet Fusion 4200 3D Printer
Accessories	M0P49C	HP Jet Fusion 4200 3D Processing Station with Fast Cooling
	MOP45B	HP Jet Fusion 4200 3D Build Unit
	M0P54B	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 ¹⁵	Please consult with your local HP 3D Printing Specialist
Original HP printheads	F9K08A	HP 3D600 Printhead
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	V1R10A	HP 3D High Reusability PA 12 30L (13 kg)
reusability materials ¹²	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)
Materials Certified for	EVNV1R14A	VESTOSINT® 3D Z2773 PA 12 30L (14 kg)
HP Jet Fusion 3D Printing ¹²	EVNV1R17A	VESTOSINT® 3D Z2773 PA 12 300L (140 kg)

ion 3D ervices	U9ZS7E	HP Ready-to-print Service
	U9EL9E	HP Installation w/Introduction to Basic Operation SVC for HP Jet Fusion 3D Processing Station with Fast Cooling
	UA420E	HP 3D Printer Initial Maintenance Kit
	UA4Y6E	HP 3D Printer Yearly Maintenance Kit
	UA4Z1E	HP 3D Post Processing Maintenance Kit
	U9EK7E	HP Advanced Operation Training Service for Jet Fusion 3D Printer (HP Training Center)
	U9EK4E	HP 3 year NBD* Onsite Hardware Support with DMR**
	U9EQ8E	HP 3 year NBD* Onsite Build Unit Support
	U9EM5E	HP 3 year NBD* Onsite Support for Processing Station with Fast Cooling
	U9TZ7E	HP 3 year Shared HW Support, Parts NBD* with DMR** and 2 onsite visits for Printer
	U9UA2E	HP 3 year Shared Hardware Support, Parts NBD* and 2 onsite visits for Build Unit
	U9UA7E	HP 3 year Shared Hardware Support, Parts NBD* and 2 onsite visits for Processing Station with Fast Cooling
	U9UB1E	HP Train to Maintain Service for Jet Fusion 3D Printer***
	U9ZS9E	HP Uptime Kit for Jet Fusion 3D Printer***

HP Jet Fusi Solution Se

U9VS9E

U9VT0F

Service

Fast Cooling 4210 3D Hardware Service

U9ZT1E HP Uptime Kit for Jet Fusion 3D Processing Station*** HP Uptime Kit for Jet Fusion 3D Build Unit***

HP Upgrade to HP Jet Fusion 4210 3D Printer Hardware

 $\ensuremath{\mathsf{HP}}$ Upgrade to $\ensuremath{\mathsf{HP}}$ Jet Fusion 3D Processing Station with

- Compared to manual print retrieval process used by other powder-based technologies. The term "cleaner" does not refer to any indoor
- Compared to manual print retineval process used by other powder-based technologies. In he term cleaner ones not reter to any indoor air quality requirements and/or consider related air quality requisitions or testing that may be applicable. The HP powder and agents do not meet the criteria for classification as hazardous according to GHS and Regulation (EC) 1272/2008 as amended. Industry-leading surplus powder reusability based on using HP 3D High Reusability PA 11 and PA 12 at recommended packing densities and compared to selective laser sintering (ISL) 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 processor excellent. process controls
- For advanced data features charges may apply in the future.

 Available in most countries, subject to Terms & Conditions of HP Limited Warranty and/or Service Agreement. Please consult your local
- Available in most countries, subject to Terms & Conditions of HP Limited warranty and/or Service Agreement. Hease consult your local sales representalities for further details.

 Testing according to ASTM D638, ASTM D256, and ASTM D648 using HDT at different loads with a 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 non-renewable sources. A renewable resource is a natural organic resource that can be renewed at the same speed which is the content of the post page of the behavior processor. 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.
- castor seeds) according to ASIM DOBOB.

 Based on HP internal testing, June 2017, HP 30600/30700/30710 Fusing and Detailing Agents and HP 3D High Reusability PA 11 powder meet USP Class I-VI and US FDA's guidance for Intact Skin Surface Devices. Tested according to USP Class I-VI including irritation, acute systemic toxicity, and implantation; cytotoxicity per ISO 10993-5, Biological evaluation of medical devices-part S: Tests for in vitro cytotoxicity, and sensitization per ISO 10993-10, Biological evaluation of medical devices-Part 10: Tests for irritation and skin sensitization. It is the responsibility of the customer to determine that its use of the fusing and detailing agents and powder is safe and technically suitable to the intended applications and consistent with the relevant regulatory requirements (including FDA evaluations and possible per part of the support of the customer to the provision of the support of t requirements) applicable to the customer's final product. For more information, see https://example.com/go/biocompatibilitycertificate/PA11 and
- requirements applicate to the customer's mail product, for more information, see <u>inp.com/go/biocompatibilitycertificate/PA11</u> and hp.com/go/biocompatibilitycertificate/PA12. Based on internal testing and public data for solutions on market as of April, 2016. Cost analysis based on: standards obution configuration price, supplies price, and maintenance costs recommended by manufacturer. Cost criteria: printing 1.4 full build chambers of parts per days faxy per week over 1 year of 30 cm³ parts at 10% packing density on fasts print mode using HP 30 High Reusability PA 12 material, and the powder reusability ratio recommended by manufacturer, and printing under certain build conditions and part recombiner.
- 10. Compared to selective laser sintering (SLS) and fused deposition modeling (FDM) technologies, HP Multi Jet Fusion technology car Compared to selective laser sintening lock) and tissed exposition modeling (FLM) technologies, HP Multi let Fusion technology can reduce the overall energy requirements for needed to attain full fusing and reduce the system requirements for led year. yearus—sealed ovens. In addition, HP Multi let Fusion technology uses less heating power than SLS systems for better material properties and material reuse rates, minimizing waste.

 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.
- 12. Liters refers to the materials container size and not the actual materials volume. Materials are measured in kilograms.

- Continuous printing requires an additional HP Jet Fusion 3D build unit (standard printer configuration includes one HP Jet Fusion 3D 5. The only terms and conditions governing the sale of HP 3D printer solutions are those set forth in a written sales agreement. The only warranties for HP products and services are set forth in the express warranty statements for such products and services. Nothing herein should be construed as constituting an additional warranty or additional binding terms and conditions. HP shall not be liable for technical should be construed as constituting an additional warranty or additional binding terms and conditions. HP shall not be liable for technical or editorial errors or omissions contained herein and the information herein is subject to change without notice. The Materials Certified for HP Jet Fusion 3D Printing have not been designed, manufactured, or tested by HP for compliance with legal requirements and recipients are responsible for making their own determination as to the suitability of VESTOSINT® 3D Z2773 for their purposes, including but not limited as regards direct or indirect food contact applications.

 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 nublication however to the maximum extent permitted hy law HP EXPERSELY INSICI AIMS ARPERSENTATIONS.
 - 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,
 - compliance with applicable laws and regulations, and be aware that other safety or performance considerations may arise when using, handling or storing the product.

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 The HP Jet Fusion 3D Printing Solution should be connected to the HP Cloud in order to enable the correct functioning of the printer

 - 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.
 - Printing supplies eligible for recycling vary 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.

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Next Business Day

^{**} Defective Media Retention

^{***} This is only for 3D Printing Shared Support Services for HP Jet Fusion 3D Printing Solutions