HP 3D MJF Printer Series

TECHNICAL NEWSLETTERS FROM CUSTOMER ASSURANCE



Region: WW Category/Area: Using Product

Audience: Support Confidentiality: Restricted (Service) – HP Workforce + Channel Partners

HP 3D High Reusability PA12 Glass Beads

This material enables the creation of sturdy, low cost, and quality parts. See the data sheet for details on material benefits and specifications.

How to use the new material

The new material is enabled in firmware release **TATDAG_12_17_40** or higher. It is compatible with PA12 at level 1 (Light cleaning required).

Details on how to clean the build unit and processing station can be found below.

New material tips & tricks

- For this material, when using lattice structures and topology optimization for MultiJet Fusion printing, resulting parts are more accurate and have better look and feel
- No different considerations need to be taken into account when orienting the parts in the bucket or designing your parts for Multi Jet Fusion printing.

How to change material

Perform the following operations:

- 1. Check and clean the interior of the build unit
- 2. Clean the processing station
- 3. Perform weekly printer maintenance: see users guide, Hardware maintenance chapter, for detailed step by step procedure

Each of these actions are detailed later within this document.

Check and clean the interior of the build unit

IMPORTANT: All build units to be used with the new material must be clean before starting.

To make sure that no material is left in the build unit, follow the steps below.

Prepare for cleaning

- 1. Ensure that you have an explosion-protected vacuum cleaner, an absorbent all-purpose cloth, a flat screwdriver, a Torx 20 screwdriver, and deionized water (not provided with printer).
- 2. You are recommended to wear gloves, goggles, and mask.

Check and clean the interior of the build unit

1. Locate the material window lid.



2. Remove the two Torx 20 screws from the material window lid.



3. Loosen the four captive flat screws.

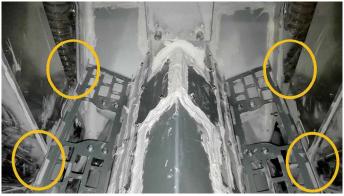


4. Remove the window.



5. Check the interior of the build unit and use the explosion-protected vacuum cleaner, if needed, to remove the remaining material. Check the areas indicated below in particular:





Finish cleaning

1. Tighten the four captive flat screws.



2. Put back and tighten the two Torx 20 screws.



3. Vacuum the area below the cap of the build unit's loading inlet.

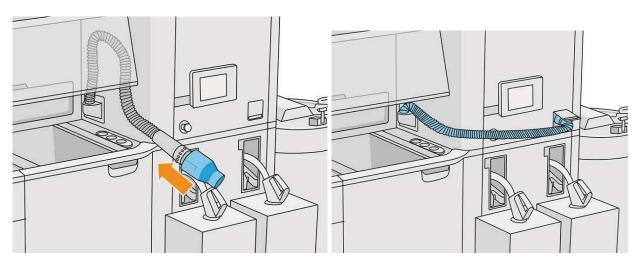


Cleaning the processing station – detailed guide

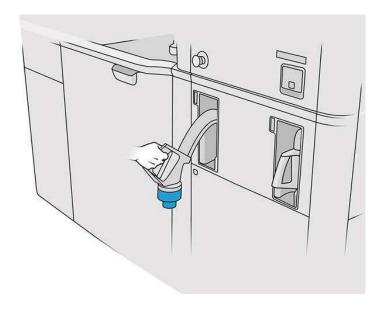
NOTE: After cleaning, some residual material may still remain in the processing station. You can remove more of the material by purging.

CAUTION: It is important to keep the purge tool in the indicated position during the whole process. In case of system error, do not disconnect the hoses. Instead, restart the processing station and restart the process, or start an unpacking process to ensure that the material left in the hoses is properly cleaned. If it is not possible to do either of these things, remove the tool from its position, keeping it horizontal to avoid possible material spillages.

- 1. We recommended that you replace the external tank with a new one. Otherwise, the process may be interrupted when the tank is full.
- 2. At the front panel, tap Settings, \rightarrow Material management \rightarrow Clean the processing station.
- 3. Ensure that the external tank is closed.
- 4. Place the sieve connector on the reclaimable material collector and connect it to the sieve.



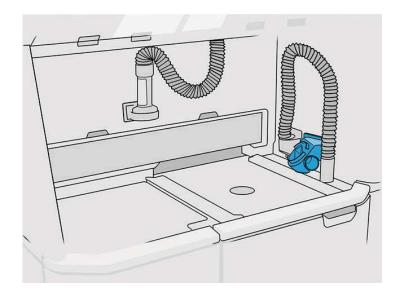
5. Disconnect the material cartridge connectors and attach the cartridge caps to them.



- 6. Stick each cartridge connector to the outside of the processing station (each connector contains a magnet).
- 7. Tap Continue on the front panel. When the processing station notifies you that it has finished, disconnect the material collector from the sieve and remove the collector.

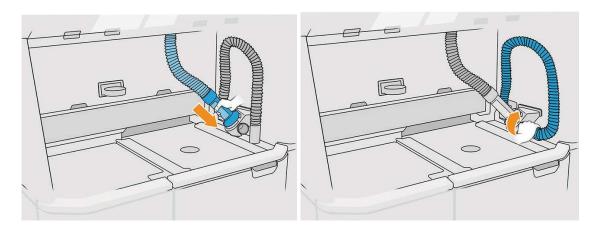
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8. Take the purge tool from the drawer and place it on the side of the working area.



9. Connect the material loading nozzle to the reclaimable material collector with the purge tool.

CAUTION: Ensure that the hoses are connected properly. The loading nozzle should be connected to the top and the material collector to the side.



- 10. Tap Continue on the front panel.

 IMPORTANT: Do not disconnect the tubes until the cleaning process has finished.
- 11. Remove the purge tools and place the material collector and material loading nozzle in the parking position. Tap Continue on the front panel.
- 12. Clean the sieve. See Clean the sieve in the user's guide.