Frequently Asked Questions

Open Material Ecosystem – FDM Technology

Background

Stratasys is implementing a new strategy that augments its material business model and ecosystem to expand material options beyond what Stratasys develops and manufactures in-house. This is accomplished by offering third-party material partners access to Stratasys 3D printers via software licensing to establish new material tiers and commercialize high-valued materials. This capability will also be licensed to customers who want to develop their own formulations or use open, third-party materials to qualify new materials for their Stratasys printer.

1. Why is Stratasys transitioning from a closed to an open material ecosystem model?

Customers demand more material options and openness to meet the needs of their business. An open material ecosystem will increase material options on Stratasys printers by enabling third-party material suppliers to develop new formulations that address unique customer requirements. This strategy will allow Stratasys to better support customers in manufacturing.

Frequently Asked Questions
Open Material Ecosystem – FDM Technology

2. How do customers benefit from an open material ecosystem?

An open material ecosystem benefits customers by providing additional third-party material options (validated and unvalidated), mitigating supply chain risk via multi-sourcing, lowering cost per part, and opening system functionality to optimize part characteristics to unlock the full potential of Stratasys technology in manufacturing.

3. What are the new material tiers being introduced?

a. Stratasys Preferred – materials optimized to meet the highest application requirements. They are engineered to provide the best combination of material and printer performance and are developed in-house by Stratasys or via a third-party material partner.

b. Stratasys Validated – materials developed in-house by Stratasys or by a third-party material partner and validated by Stratasys with basic reliability testing. A third-party material may or may not be exclusive to Stratasys. Establishing this new tier allows Stratasys to introduce new materials into the market more quickly.

c. Open – materials created outside the purview of the Stratasys and partner material development process. Although these materials may offer unique attributes and the potential to address new applications, they are untested and have not received any validation testing or optimization relative to performance and functionality on a Stratasys printer.

4. What is the definition of an open system?

An open system refers to the capability of adjusting (tuning) specific print parameters on a Stratasys printer to achieve desired part mechanical performance and print quality with the chosen material.

5. What is meant by material “tuning?”

Tuning refers to the process of optimizing printer process parameters to achieve a specific standard of material performance, print quality and printer reliability. This is accomplished using printer parameter editing software.

6. How do I access this new capability?

Accessing open materials is enabled through the purchase of an Open Material License (OML), accessible via GrabCAD Print™ software. For FDM® printers, this capability will be introduced on hardened platforms starting with the Fortus 450mc™ in 2022. “Hardened” printers are capable of printing materials with more abrasive qualities and use components with greater anti-wear properties. Licenses are applicable on a per-printer basis by printer serial number.

Frequently Asked Questions
Open Material Ecosystem – FDM Technology

7. Is an OML a one-time purchase or a recurring cost?

An OML is a subscription-based software license that must be renewed annually for a recurring fee.

8. What is included in the purchase of an OML?

Each OML is licensed for a specific printer and includes the following:

a. OML SW Tool – software tool functioning within GrabCAD Print that allows a licensed user to edit and customize printer parameters and create upgraded files

b. Material Tuning User Guide – instructions and best practices on the use of the OML SW Tool and material tuning methodologies

c. Consumable Starter Kit – a bundle of canisters, spools, tip, and e-prom chips

d. Open Material License – licensed users will be granted access to use open materials

9. Can I use any third-party material on an open Stratasys printer?

Yes. OML customers may use any third-party materials not validated by Stratasys. However, use of these materials may affect the printer's warranty. Contact your Stratasys representative or reseller for additional information. Consumables such as canisters, spools, build sheets, tip, development e-prom chips, and support materials will be sold to customers to enable printing of these materials.

10. How do I purchase a Stratasys Validated material?

Like Stratasys Preferred materials, validated materials are sold directly through Stratasys or through our reseller network.

11. Can I use a validated material if I do not purchase an OML?

Yes. Customers do not need an OML to use a Stratasys Validated material.

12. Can I adjust print parameters of Stratasys Preferred and Validated materials if I have purchased an OML?

Yes. If your printer is licensed with the OML and the Stratasys material license, you will be able to change the print parameters.

13. What are the print parameters that can be edited using the OML Software Tool?

This is currently being defined and more details on software functionality will be provided in the future.

Frequently Asked Questions
Open Material Ecosystem – FDM Technology

14. Will the OML be available as an upgrade? If so, when can I purchase a license?

Yes, an OML is available on specific Stratasys AM technologies today. The OML will also be offered as an upgrade for existing FDM Fortus 450mc customers in 2022 and additional FDM printers in the future.

15. Who has Stratasys partnered with and what Stratasys validated materials will be commercialized in the future?

Stratasys is currently engaged with material partners to address ever demanding applications in space, passenger rail, oil and gas, general manufacturing, and other industries and will provide additional details in the future.

16. Will this open material model be made available on all Stratasys AM technologies?

These FAQs pertain primarily to FDM technology. Stratasys P3™, SAF™ and Neo® series stereolithography printers also have open material options unique to those technologies. Additional Stratasys technologies may adopt this model as it makes sense from a business, material-partner and customer-benefit perspective.

Stratasys Headquarters

7665 Commerce Way,
Eden Prairie, MN 55344
+1 800 801 6491 (US Toll Free)
+1 952 937-3000 (Intl)
+1 952 937-0070 (Fax)

1 Holtzman St., Science Park,
PO Box 2496
Rehovot 76124, Israel
+972 74 745 4000
+972 74 745 5000 (Fax)

stratasys.com
ISO 9001:2015 Certified