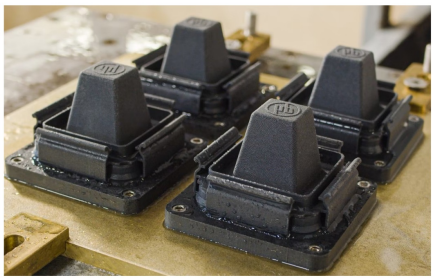
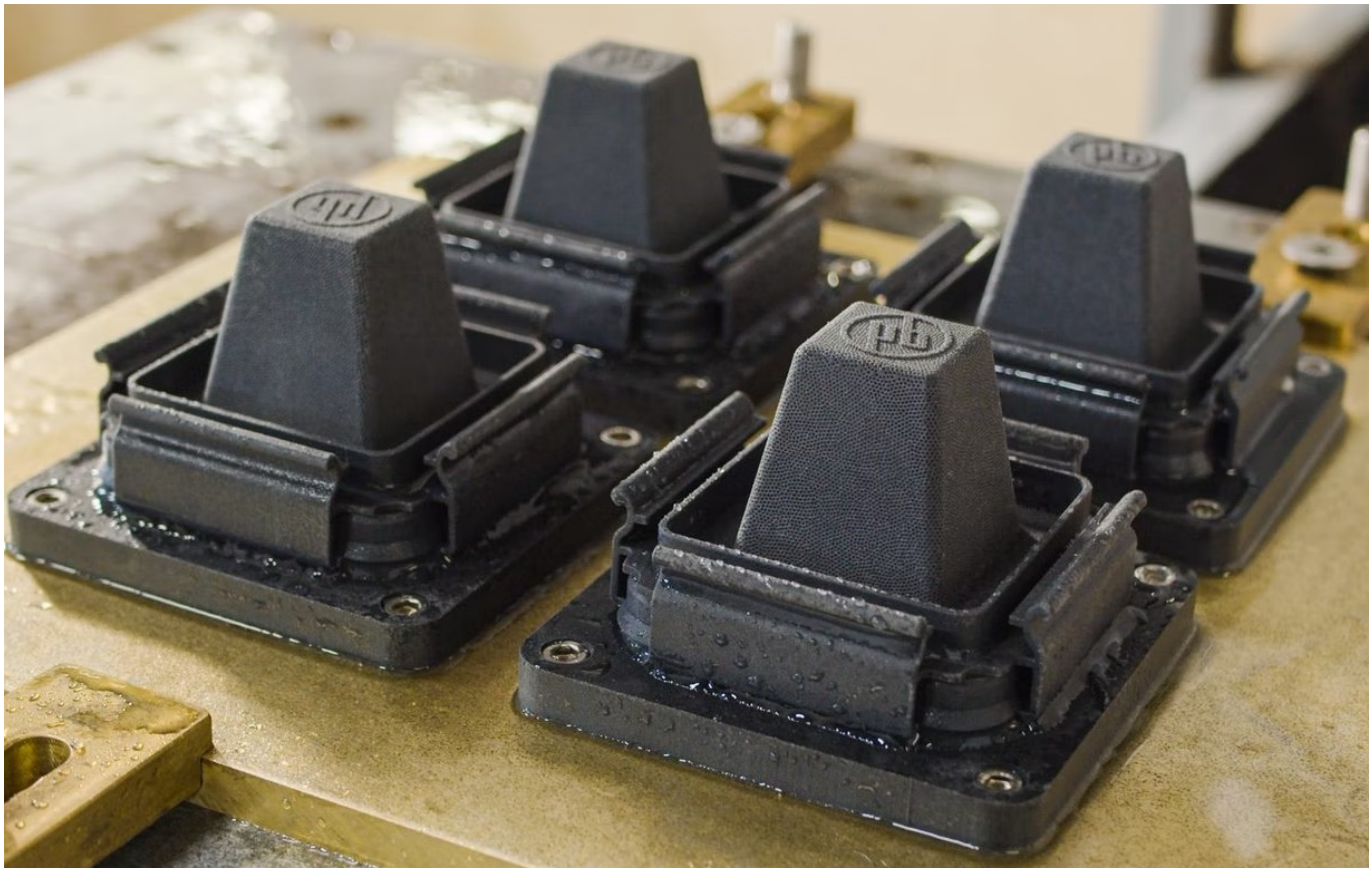


hp Molded Fiber Advanced Tooling Solution Instructions

Contents

hp Molded Fiber Advanced Tooling Solution



INCREASE YOUR PRODUCTIVITY WITH THE HP MOLDED FIBER ADVANCED TOOLING SOLUTION,, THAT DELIVERS:

How?

- HP engineering expertise

- HP’s new technology capabilities

- HP’s new molded fiber software solutions

ENGINEERED PRODUCTION-CAPABLE TOOLING

- HP’s 3D Printing proprietary tooling technology
- Digitally controlled design

Engineered fluid pathways for:

- Faster1 forming and de-watering
- Smooth part release
- Less stoppages with enhanced flow tooling

Repeatability

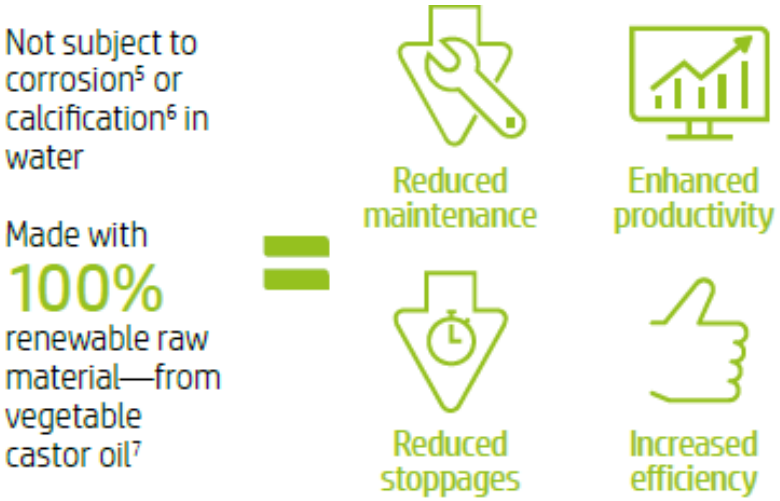
- design once and print as many copies as needed

Strong performance

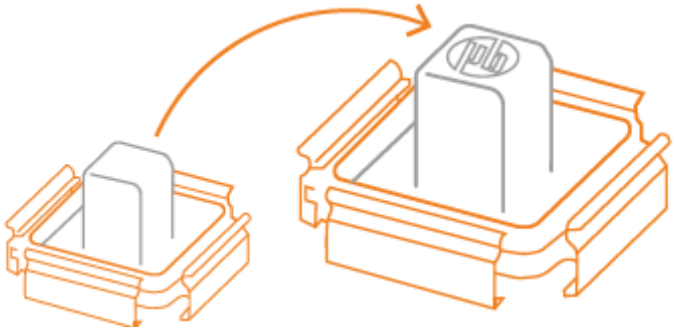
- tooling with dimensional accuracy, fine detail, and optimal mechanical properties

CUT LEAD TIME, REDUCE MAINTENANCE TIME

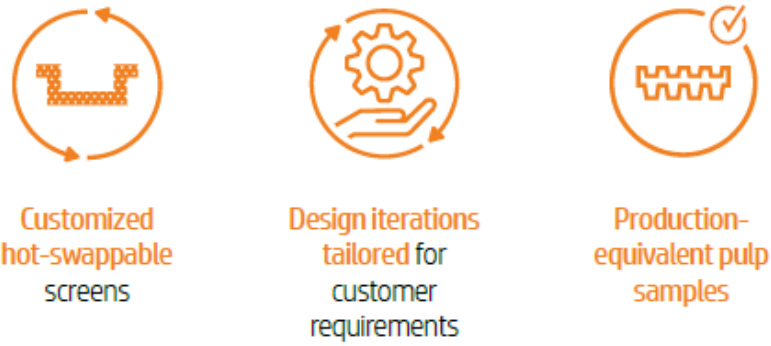
- Fast lead time
- HP hot-swap SmartScreen2 Rapid snap-fit screen replacement with lightweight tools3
- HP molded fiber tooling produced with HP 3D High Reusability PA 11 material4



CUSTOMIZED SHORT RUNS



- Digital workflow and HP technology capabilities enable new revenue streams



1. Compared to traditional CNC and manual tooling processes as of June 2020. Based on internal HP analysis

and testing including expert interviews and a review of published market reports. 4-6 weeks average fabrication lead time when producing in CNC.

2. HP hot-swap SmartScreens can be replaced in seconds.
3. No machining, drilling, or manual screening is needed.
4. HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability PA 11 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.
5. Polyamides in HP 3D High Reusability PA 11 material do not corrode with water (a common problem with metal tooling). Based on internal HP testing, August 2020. HP tools produced with HP 3D High Reusability PA 11 material were tested over 5 days at 50° C (122° F) using 4 different solvents (DI water – control, tap water, CaCO3 saturated, and 5 wt% aluminum potassium sulfate), and presented no visual signs of corrosion. For details, see **hp.com/go/MoldedFiberWhitepaper.**
6. Polyamides in HP 3D High Reusability PA 11 material do not present calcification signs with water (a common problem with aluminum tooling). Based on internal HP testing, November 2020. HP tools produced with HP 3D High Reusability PA 11 material were tested over 17 days at ambient temperature using 3 different solvents (DI water – control, tap water, CaCO3 supersaturated), and presented no visual signs of calcification or weight changes. For details, see: **hp.com/go/MoldedFiberWhitepaper.**
7. 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 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 visit: **hp.com/go/MoldedFiberTooling**

Documents / Resources

	hp Molded Fiber Advanced Tooling Solution [pdf] Instructions Molded Fiber Advanced Tooling Solution, 4AA7-7871EEW, Molded Fiber

References

- HP Molded Fiber Advanced Tooling Solution for molded pulp production tooling | HP® Official Site
- hp.com/go/MoldedFiberWhitepaper