易加三维
E-PLUS-3D

EP-P420

SELECTIVE LASER SINTERING 3D PRINTER

EP-P420

EP-P420 adopts polymer powder bed fusion (PPBF) technology, with max up to 420x420x465 mm building cylinder, EP-P420 ensures you the capability to print medium & large size parts for customized products and small batch production. Thanks to its innovative software and hardware, the EP-P420 is well designed user-friendly and cost-effective.

High Performance

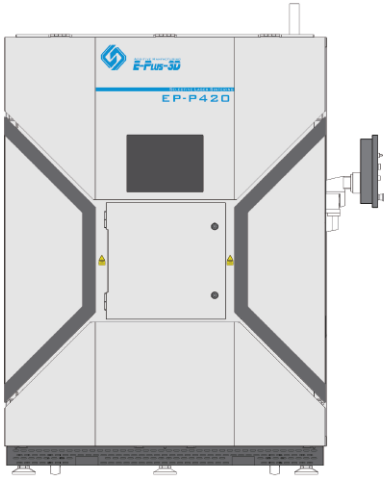
- Optimized temperature real-time management system, temperature filed fluctuation ≤ ±1.0 ℃
- Advanced optical scanning path strategy, ensures superior details and surface quality of final parts
- Up to 260 ℃ building temperature, the machine is allowed to print more types of polymers
- Discrete variation of mechanical properties for full-scale printing parts is less than 5%
- High material reuse rate, fresh powder drops to 20% of refreshment rate

High Efficiency

- With 120w laser power, the machine has higher printing speed
- Detachable forming cylinder, two alternative cylinders are used to shorten the time for next printing job
- Detachable optical protective windows, makes daily maintenance easy
- Open printing parameters, enables the development of new material
- Distinctive scanning strategy, saves the scanning time
- Real-time powder feeding system, saves the printing material
- Large volume powder dispenser, one time feeding to meet the whole cylinder printing

User-Friendly & Intelligent

- One-click scanning path generation
- Capability to print with one-click
- Printing report automatic generation, the printing process can be tracked
- Malfunction automatically process, avoids damage to the equipment



Auxiliary Equipment Optional

Powder clean platform, sand blaster, powder mixer, fork truck, vacuum cleaner

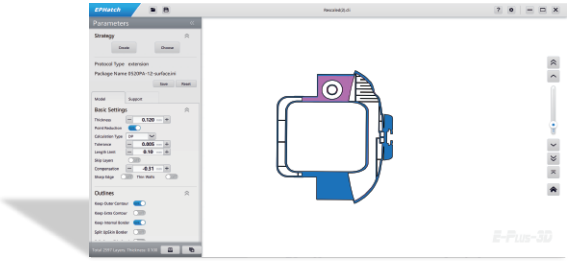
Other Optional Accessories

Detachable forming cylinder, Detachable optical protective windows

EPLUS Software Solutions

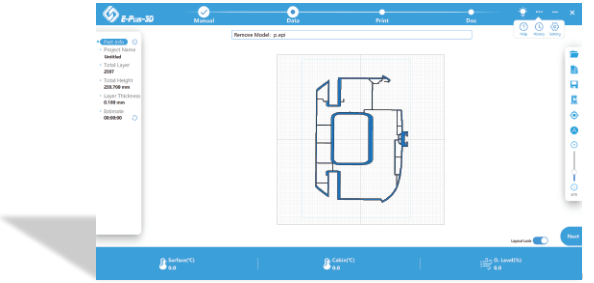
EP Hatch Printing Process Planning Software

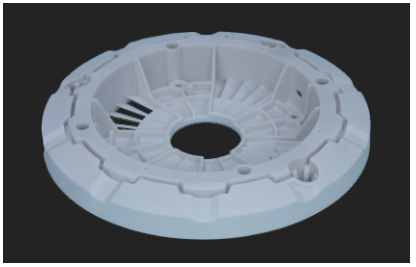
EP Hatch is a process planning software independently developed by EPLUS 3D for its additive manufacturing systems. It can optimize the printing path based on the data that has been sliced and output, and set the scanning path separately for contour, interior, upper and lower surface of the part. In addition, EP-Hatch comes standard with a variety of advanced scanning strategies like long straight lines, short straight lines and checkerboards for the user, enables an optimal process setting for specific materials.

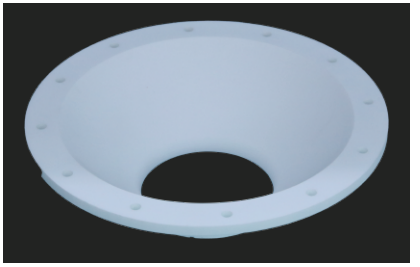


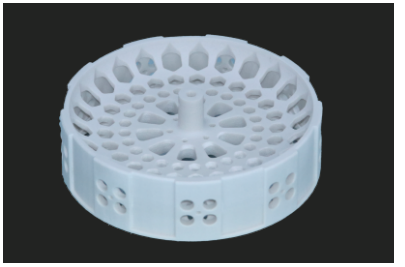
EPlus3D Control Software

EPlus3D control software is a powerful control system independently developed by EPLUS 3D for its additive manufacturing systems, with open and friendly interface, it enables our users to manage their digital files easily from build preparation and parts positioning all the way to in build monitoring and reports generation. It is a powerful control and operating system for mature materials printing, as well as new materials development.









TECHNICAL SPECIFICATIONS

EP-P420

Build Volume	420×420×465mm (L×W×H)
Machine Weight	Approx. 2500kg
Scanning Speed	Max. 13m/s , sky-writing
Max. Chamber Temperature	260℃
Power Supply	380V, 50Hz , 3-phase
Layer Thickness	0.06mm-0.30mm
Laser Power	CO_2 laser，120W
Scanning System	Dynamic scanning focus + High-precision galvo system
Thermal Field Control	Independent four-zone temperature control system
Temperature Regulation	Continuous real-time building surface temperature monitoring
Control Software	Eplus3D Printing Software
Output Data Format	STL .OBJ .STEP or other convertible file
Material	PA11,PA12,PA6 and its composites

* Notice: E-Plus 3D reserves the right to explain any alteration of the specifications and pictures.