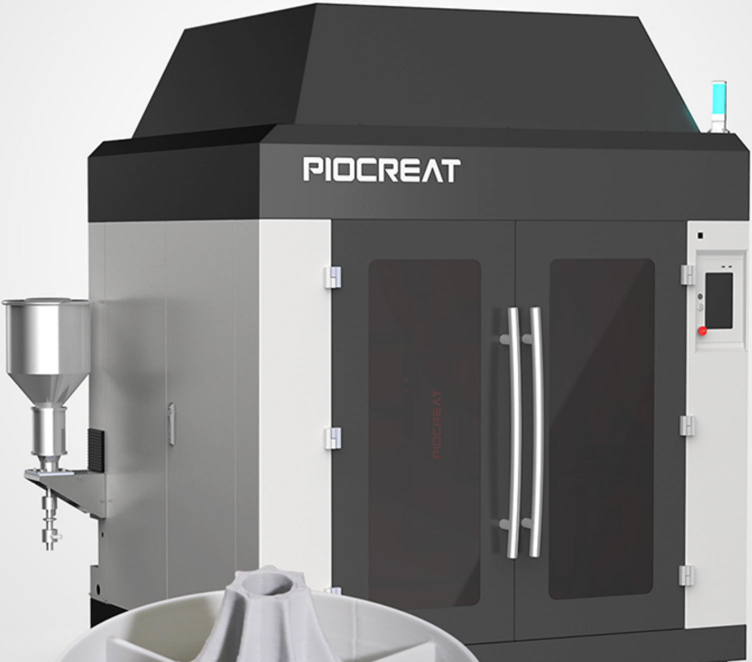
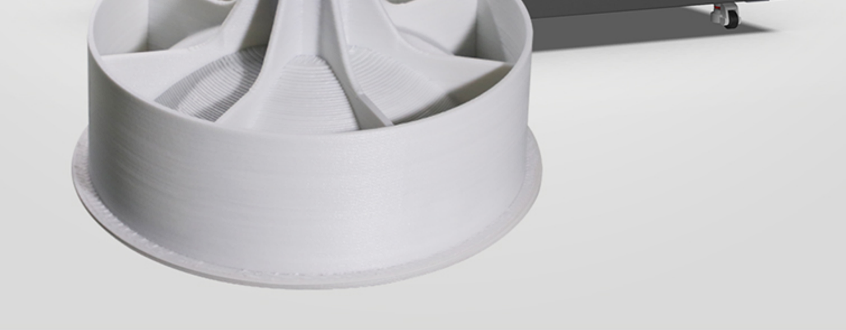
PioCreat G12

Industrial Grade Pellets 3D Printer

Larger size / Better configuration / Better quality

Large industrial parts, mold design, home and artwork, sculpture production, model validation, research aids, display props, shaped curtain wall 3D printing


PIOCREAT
PIOCREAT

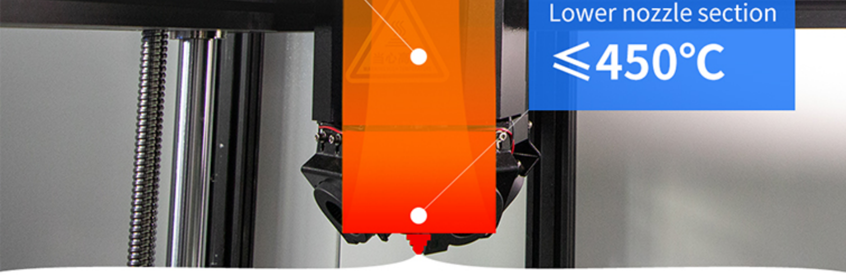


New Generation Printhead Print Assembly

Segmented heating design, more stable material discharge

The self-developed new generation screw extruder nozzle assembly is designed with segmented heating, the maximum nozzle temperature is 450°C, the extrusion force is strong, the print head can be retracted, the discharge is more stable, smooth, and there is no head blockage, so as to facilitate fast and stable printing.

Upper nozzle section
≤440°C
PCREAT

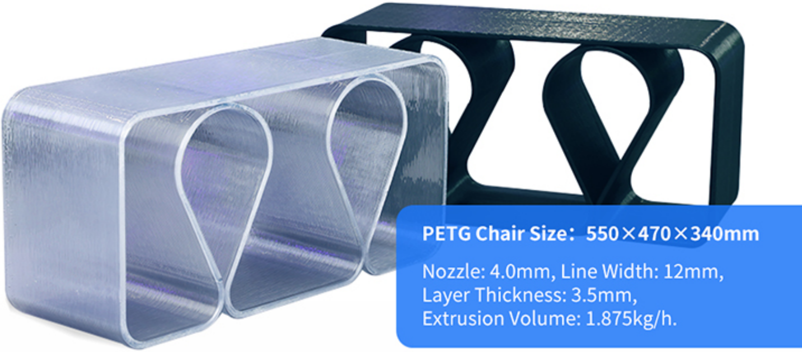


Lower nozzle section

≤450°C

Maximum extrusion volume up to 3 kg/h

Self-developed large-capacity screw extrusion design, flexible selection of 0.8-4mm diameter nozzle printing speed up to 90mm/s.



PETG Chair Size：550×470×340mm

Nozzle: 4.0mm, Line Width: 12mm,
Layer Thickness: 3.5mm,
Extrusion Volume: 1.875kg/h.

Prints a wide range of printed materials

Plastic granules, recycled materials, modified and composite materials

Ability to print with 2-5mm plastic pellets melted below 450°C reduces reliance on filament printing and supports mixing of plastic pellets or addition of color masterbatches.

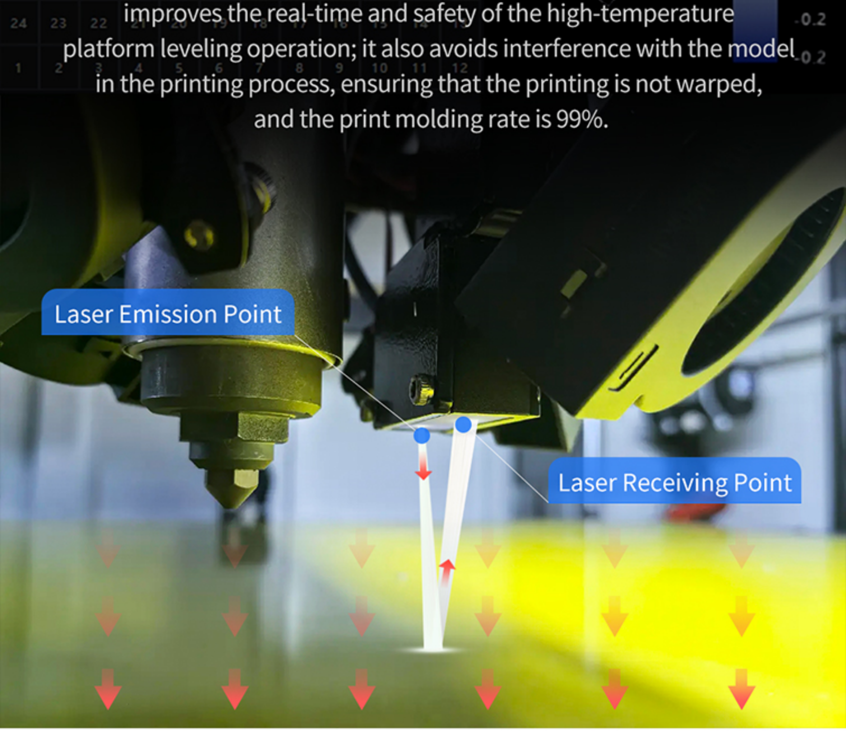
PLA\PC\ABS\PETG\PETG-GF/PP/TPU/PA-CF/ABS-CF /PC-CF and some modified and composite materials.

120 119 118 117 116 115 114 113 112 111 110 109
97 98 99 100 101 102 103 104 105 106 107 108
96 95 94
73 74 75 76 77
72 71 70 69 68 67 66 65 64 63 62 61
49 50 51 52 53 54 55 56 57 58 59 60
48 47 46 45 44 43 42 41 40 39 38 37
25 26
0.2
0.2
0.1
0.1
0.0
0.0
-0.0
-0.1
-0.1

Intelligent Laser Ranging 120-point leveling

Significantly reduces leveling time and improves leveling accuracy

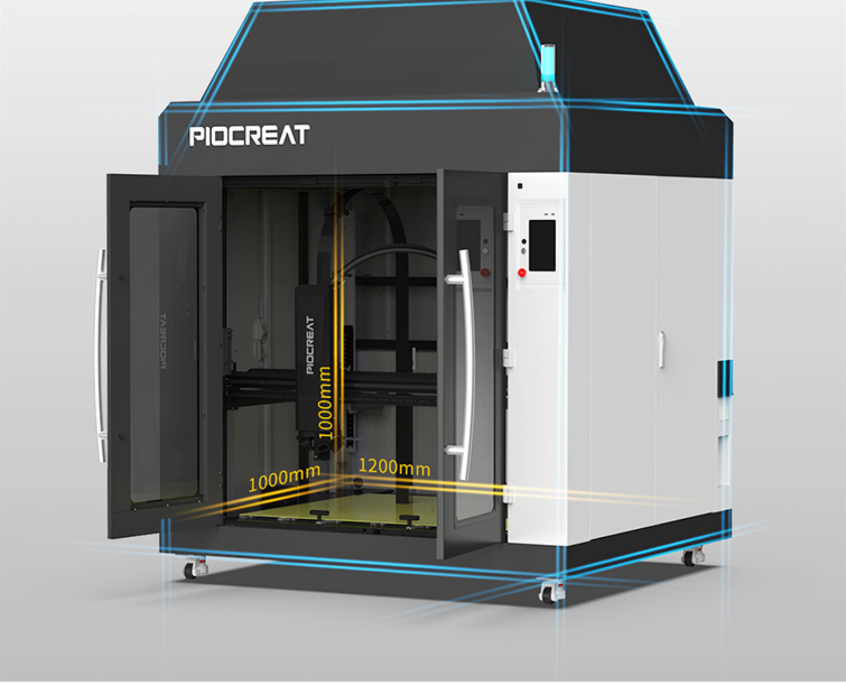
The use of laser sensor non-contact measurement technology improves the real-time and safety of the high-temperature platform leveling operation; it also avoids interference with the model in the printing process, ensuring that the printing is not warped, and the print molding rate is 99%.


Laser Emission Point
Laser Receiving Point

1200L Large Volume Printing

G12 print size: 1200×1000×1000mm

Large-size models to meet the needs of more industrial production. Such as industrial parts, mold design, home and art, sculpture production, scientific research and teaching aids, display props, shaped curtain wall 3D printing, etc., more focused, professional, industrial grade print quality.

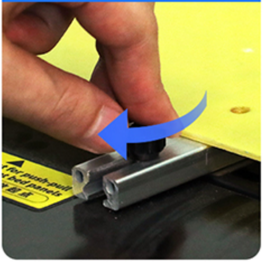

PIOCREAT
1000mm
1000mm
1200mm

Quick release platform design

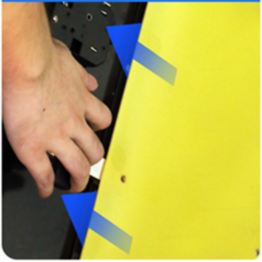
Loosen the set screws, pull out the platform, and bend it to quickly remove the mold.

When removing the model after printing, you can use a spatula to remove the mold directly. Alternatively, the mold can be quickly removed by bending the fiberglass panel.

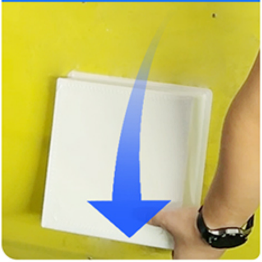
Loosen



Pull out



Bend



Hot bed zoning work

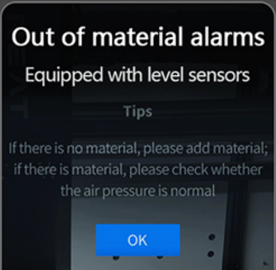
During the slicing process, the heating module is automatically turned on or off depending on the block in which the model is located.

Automatic selection of heating zones based on model size maximizes energy cost savings and extends machine life. Preheating of the hot bed to 80°C takes less than 3 minutes.

hot bed≤130℃

25L large capacity hopper

Transparent barrels for real-time viewing of residual material



Out of material alarms

Equipped with level sensors

Tips

If there is no material, please add material; if there is material, please check whether the air pressure is normal

Material break/power cut refill

Renewal success rate of over 95%

Camera/Time-lapse

Magnetic fixing, customizable position

Guide Belt Module

Realization of high-precision and high-load motion control

Replaceable nozzles Standard: 1.2 mm 1.5 mm 2.0 mm 3.0 mm 4.0 mm

*The above data is from Piocreat Labs and is for informational purposes only.

Material Validation & Proofing

Free test samples

1.Customer Industrial Design 2.Print Evaluation
3.Customer Material Shipment 4.Material Print Testing
5.Customer Model Acceptance 6.Contract Printing 7.Training & Support

Customer Industrial Design › Print Evaluation › Customer Material Shipment › Material Print Testing

Customer Model Acceptance › Contract Printing › Training & Support

Multiple materials and Accessories, Enjoy Official Support

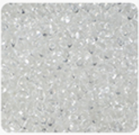
ABS

ABS+CF

PLA

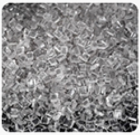
PETG

PETG+GF


TPU

PP

PC+CF


PC

PAHT-CF

3D Printing Platform Glue

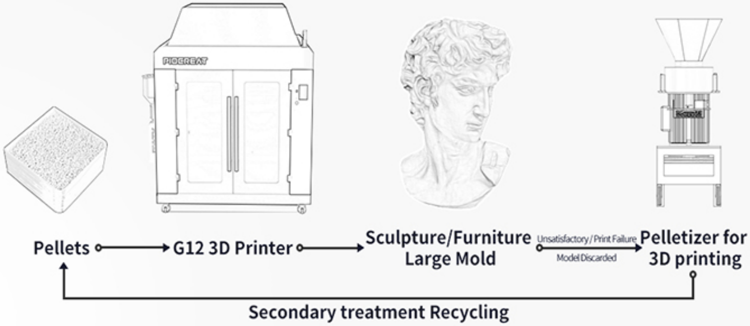
1.2mm
1.5mm
2.0mm
3.0mm
4.0mm
Nozzles of Various Types

Suction + Dryer

Pellet Recycling Solutions

Costs only 10-50% of filament

By secondary treatment of waste/failed models, materials can be recycled again. The cost of material consumption is greatly saved, while the environmental damage caused by industrial waste is reduced.


PIOCREAT
Pellets
G12 3D Printer
Sculpture/Furniture
Large Mold
Unsatisfactory / Print Failure
Model Discarded
Pelletizer for
3D printing
Secondary treatment Recycling

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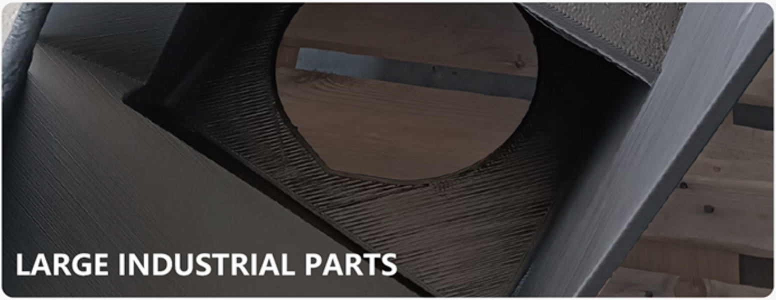
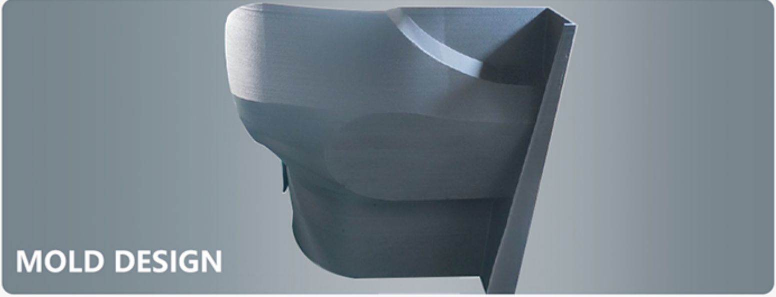
Application

Large industrial parts, mold design, home and art, sculpture production model verification, scientific research teaching aids, display props, shaped curtain wall 3D printing

MATERIAL TESTING


LARGE INDUSTRIAL PARTS



MOLD DESIGN

HOME & ART

MAKING SCULPTURES

DISPLAY PROP

Product Parameters

G12 PELLET 3D PRINTER

Molding Technology	FGF Fused Granule Fabrication
Supply Voltage	Single-phase AC 220V /(American)AC 110V
Print Size	1200 x 1000 x 1000mm
Nozzle Diameter	0.8-4.0mm，Standard（1.2mm/1.5mm/2.0mm/3.0mm/4.0mm）
Hopper capacity	25000ml
Discharge unit	Screw extrusion
Number of nozzles	Single nozzle
Slicing Software	Piocreat Slicer/Cura/Simplify3D
Print Layer Thickness	0.2-2.0mm
Net Weight	750kg
Language	English/Simplified Chinese/German/Spanish/French/Italian/Japanese/Portuguese
Print Material	PLA/PC/ABS/PETG/PA-CF/PETG-GF/PP/TPU/ABS-CF/PC-CF and some modified and composite materials
Pellet Diameter	2-5mm

Rated power	7000W
Machine size	2135 x 1775 x 2305mm
Upper nozzle temperature	≤440℃
Lower nozzle temperature	≤450℃
Hot bed temperature	≤130℃
Maximum speed	90mm/s
File format	STL、OBJ、3MF
Transmission method	U disk printing/WIFI
Gross weight	1285kg