

FGF-3000PRO

Kings Industrial FGF 3D Printers

Large Format, High Speed, Low Material Cost



◆ Overview

Kings FGF-3000Pro is large-format, industrial pellet extrusion 3D printers for mold industry with advantages of lower material costs, high printing efficiency, and excellent printing stability. It uses thermoplastic pellets for mold manufacturing like PETG+30%GF (heat resistance up to 90°C) , PP+30%GF (130°C), PC+30%GF(140°C), PPS+CF(200°C) etc.. Typical applications include autoclave molds/carbon fiber molds, foam molding molds, vacuum forming molds, thermoforming molds, sand casting molds.

◆ Advantage

- Complex Structures Printing. Enables the production of complex geometries and large build volume for one-piece molds without traditional mold assembly
- Material Compatibility. Supports a wide range of thermoplastic grades, including high-performance, fiber-reinforced, and recycled plastics
- Controlled accuracy. Reduces dimensional deviations and minimizes errors caused by multi-part assembly
- Automatic feeding system to support continuous printing 24 hours per day
- Energy-Efficient Heating Control. Multi-zone independent heating activates only necessary areas, reducing energy consumption during mold printing
- Cost-Effective Mold Production. Uses thermoplastic pellets, making prototyping and mold production highly economical

◆ Ideal Applications

- It is mainly used for large-scale industrial molds (such as automotive molds and molds for wind power casting components), cost-sensitive batch mold production (such as molds for precast construction components), and molds that require high structural strength (such as reusable molds for sand casting processes)

◆ Technical Data

Molding technology	Fused granular fabrication
Molding dimensions	(L*W*H) 3000 * 2000 * 1000mm
Machine dimensions	(L*W*H) 4104 * 3067 * 3100 mm
Optional nozzle diameter	2-6mm
Nozzle heating method	Three-zone intelligent heating
Drive mode	Servo motor
Control system	Self-developed New Generation CNC System
Machine weight	6000kg
Printing bed	Composite Plastic
The maximum temperature of the nozzle	≤350 degrees celsius (450 degrees celsius is optional)
Printing connection method	SD/USB/Wi-Fi
Slicing supported formats	STL/OBJ/AMF/3MF/STP/STEP
Automatic feeder	Integrated
Slicing software	Kings studio
Power supply voltage	Three-phase AC 380V
Granular dryer	100kg tank/8kW/220V±10%/36.3A/50 or 60Hz/Single phase/0.6MPa/200L per min
Materials	ABS/ABS Fire Retardant/ABS+GF/ABS+CF/PETG/PETG Fire Retardant/PETG+GF/PLA/ASA/ASA+GF/TPU/PC/PA/PP/PA+CF/PC+CF/PEI+CF etc.

