INDUSTRIAL CNC, INDUSTRIAL STANDARDS: RELIABILITY, REPEATABILITY, PRESICION AND SAFETY

INDUSTRIAL CONTINUOUS FIBER 3D PRINTER PROM IS 500:

→ large build volume: 600mm x 420mm x 300mm;
→ rapid production of end-use continuous fiber reinforced composite parts: up to 60 cm3/hour in CCF mode;
→ high temperature plastics (up to 400C) as a matrix: PEEK, PEI;
→ up to 160C heated chamber temperature;
→ up to 4 changeable print heads: CFC (composite: Carbon/Basalt) and FFF (plastic);
→ powerful software providing full fiber layup control;
→ printing composite lattices — optimal structures for composites: lower weight, price and production time of the part.

Basic Specifications

Industrial CNC	
Automated bed leveling	
Automated extruder calibration	
Part geometry tolerance control	
Interface	Ethernet, USB, Touchscreen
Material sensors	Optical sensor for filament

Printing

Printing technology	Composite Fiber Co-extrusion (CFC); Fused Filament Fabrication (FFF)
Print platform size	600mm x 420mm x 300mm
Layer thickness, min.	60μm
Number of print heads	Up to 4
Print head types	FFF: Print Head up to 270C Print Head for soluble material HT Print Head (up to 400C - option) CFC: Print Head 1.5k CCF with cutter Print Head 3k CCF with cutter Print Head CBF with cutter
Print head cooling system	Liquid cooling
Nozzle diameter, FFF	0.4 mm ... 1.5 mm
Plastic filament diameter	1.75 mm
Compatible plastics	Any plastic with processing temperatures up to 270°C: PLA, ABS, PETG, PA(Nylon), TPU, PC, ASA SBS (Also any CF/GF filled plastics using hardened steel nozzle); High temperature plastics (up to 400C): PEEK, PEI;
Reinforcing fiber	Anisoprint CCF 1.5k (Composite Carbon Fiber) Anisoprint CCF 3k (Composite Carbon Fiber) Anisoprint CBF (Composite Basalt Fiber)

Temperature

Maximum plastic extruder temperature	270C; 400C (option)
Maximum composite extruder temperature	Up to 400C
Maximum platform temperature	160C
Material storage temperature	30C ... 90C
Maximum temperature for heating chamber (optional)	160C

Software

Slicer	FFF + CFC: Anisoprint Aura Pro, Aura Server FFF: Conventional G-code slicer
OS support	Windows 7+

Physical characteristics

Printer size (LxWxH)	1.9m x 1.2m x 1.9m