

WORLD'S FASTEST 3D PRINTER

WHY CBAM 25?

Capable of print speeds 15x faster than the nearest competitor, the CBAM 25 is changing the way things are made by bringing the power of 3D printing to volume manufacturing.

Faster 3D Printing: The CBAM 25 prints 25 feet per minute and produces parts 15x faster than any other technology on the market.

Better Dimensional Accuracy: Long-carbon fibers are combined with 50 micron-size polymer powders, enabling the CBAM 25 to achieve tolerances up to 125 microns.

Stronger & More Versatile Materials: CBAM 25 advanced composite material set achieves very high chemical and temperature resistance and mechanical properties superior to most engineering plastics.

UL 94V-0 Certified

WHAT IS CBAM?

CBAM or Composite Based Additive Manufacturing uses high-speed printing methods to produce high-performance composite parts without tooling or messy resins.

Long-fiber sheets of carbon fiber or fiberglass are combined with PEEK and other high-performance polymer powders.

Once the excess polymer powder is vacuumed from each individual sheet, they are stacked in the shape of the CAD bitmap file.

Next, the stack of sheets are heated and compressed to the melting point of the polymer and finally, the un-bonded portions of sheet fibers are removed through manual or automated bead blasting processes.

What is left is an advanced composite part with an excellent strength-to-weight ratio compared to aluminum.

MAKING THE WORLD. FASTER.

CBAM 25 INCREASES PRODUCTIVITY

CBAM 25		2,968
SLS	196	15X FASTER
HSS	177	
FFF	96	

Productivity cm³/hour*

* CBAM 25 numbers account for real-world packaging density and machine uptime.
Raw print speed for CBAM 25 is 10,000 @/hour.



CBAM 25 TECHNOLOGY BENEFITS

Designed for Manufacturing Environments

Load and unload while run technology for powders, inks, and build blocks

Roll fed substrate minimizes sheet handling errors and increases productivity

AI-based, in-situ process control to ensure stable and repeatable printing

High Performance Materials

Unlike short fibers, long-fiber carbon enables stronger and more mechanically sound parts

Advanced polymer powders that are chemical and heat resistant

UL 94V-0 Certification

Real Time Defect Detection and Avoidance System

Automatic print monitoring and correction with Smart Yield technology

Minimizes scrap builds

Improves productivity uptime and reduces costs

Simple Operating Environment

CBAM 25 operates in standard industrial environments

No hazardous waste or explosion risks

No special material storage requirements

Operates with standard shop utilities (air, power)

High Dimensional Tolerance

Bulk thermal processing eliminates warping, cracking and seams associated with other 3D processes

Typical accuracy 400 microns, up to 125 microns achievable with reprint

Sustainability Focused

Room temperature printing means no wasted powder

Unfused fibers can be recycled

CBAM 25 PRINTER SPECIFICATIONS*

Specification	Data
TECHNOLOGY	Composite Based Additive Manufacturing (CBAM)
MAX BUILD VOLUME	18 X 17.7 X 4 inches (457 x 449 x 101 mm)
PRODUCTION SPEED	11,000cm ³ per hour 25 feet per minute
POST PROCESSING	Heating, Pressing & Auto/Manual Support Removal
MINIMUM WALL THICKNESS	2mm
SUPPORT	No support material No restriction on build angles
SHEET SUBSTRATE	Carbon Fiber or Fiberglass
LAYER THICKNESS	50-60 Micron
POLYMER POWDER(S)	PEEK and Nylon 12
POWDER SIZE	50-70 micron
PRINTER DIMENSIONS	20 x 5 x 5 feet
POWER REQUIREMENTS	220 V / 2 Phase 30 Amp
OPERATING TEMPERATURE	70° / 50% relative humidity
NETWORK COMMUNICATIONS	10BaseT (1Gb)
PRINT RESOLUTION (x,y)	1200 x 1200 dpi
PRINT ACCURACY	.005 inches (125 microns)

*Specifications subject to change

