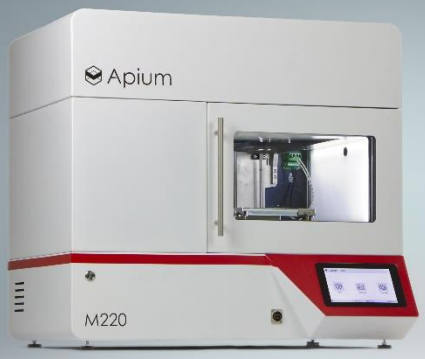


Apium M220

Apium provides a cost-effective solution to manufacture customized implants

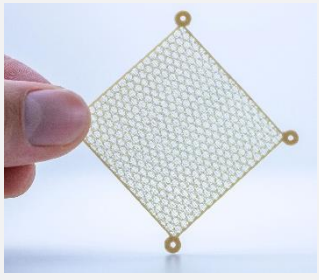
The M220 is the world's first 3D printer designed specifically for the manufacturing of medical products and implants made out of PEEK.

Sterile printing environment

The patented **hot-air filter system** analyses the component geometry and adapts the heating power to achieve always an optimum energy input. The air flow enclosing the component is filtered in a practically particle-free circuit.

New extrusion technology

Our extruder was developed regarding flexibility and durability. The **four times higher feed force** compared to its previous models enables a precise material flow. All components in contact with the printing material are made of **medically compatible materials**: PEEK, Titanium, 316L Stainless Steel and PTFE.



Biocompatible filaments

In cooperation with Evonik, materials and filaments were tested for their **biocompatibility.** The corresponding tests were successfully completed both in and outside the clean room. This allows medical devices up to **Class III** to be manufactured from PEEK.

Apium
Additive Technologies GmbH

Monitored printing process

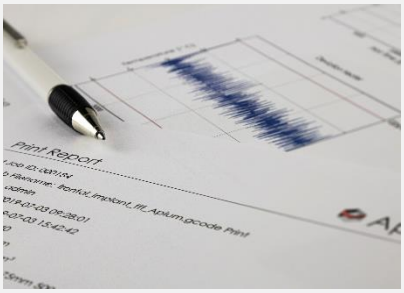
By integrating a **camera system**, **temperature recording** and **servomotors**, the printing process is continuously monitored. This enables the printer to intervene automatically when deviations occur.

Reproducibility

Integrated **calibration routines** guarantee consistent component quality. The Apium print control software automatically notifies you about **maintenance operations** and guides you through the procedures step-by-step.

Documentation & Safety

All the important parameters concerning the printing process are automatically provided in a **PDF protocol**. The integrated user administration prevents any unauthorized access. For your **data security**, we have decided against cloud based solutions.



Integrated software

The control software is specially adapted to our printer hardware and optimized for processing high-performance polymers. An intuitive user interface allows an easy handling of the printer. You can **manage print jobs** and check the status of the printer at any time.

Technical support

Our **service department** will train you in the handling of your printer. We will be happy to answer any questions you may have about the printer and other challenges of 3D printing with high performance polymers.

Build Size
130 x 130 x 130 mm

Printer Size
850 x 685 x 675 mm

Weight
67 kg

Machine Accuracy
10 µm horizontally
3 µm vertically

Nozzle Diameter
0,2 – 0,8 mm

Layer Thicknesses
0,05 – 0,6 mm

Wall Thickness
> 250 µm

Printhead-Temp.
Up to 540°C

Hot-Air Filter System
Up to 280°C

PrintBed Material
Stainless steel 316L

Power Consumption
600 W max.

Noise Emission
< 70 dB(A)

Data Formats
STL, OBJ, G-Code

Connectiviy
WLAN*, Ethernet
*can be disabled

Print Material
Vestakeep i4 G

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Made in Germany

Apium
Additive Technologies GmbH