

Apium P400

A New Level of Additive Manufacturing



The Most Flexible Platform for Processing High Performance and Engineering Polymers

Next Generation Adaptive Zone Heater

The patented **Adaptive Heating System** delivers outstanding layer adhesion, resulting in maximized printed part strength and quality. Equal material properties in all directions can be expected, like conventionally manufactured parts.



Energy Efficiency

Due to the adaptivity of the zone heater, printing large parts as well as small geometries avoids the disadvantages of heated build chambers such as time and energy consuming heating and cooling of the entire build volume.

Multi-Material Processing

The Apium P400 provides a platform for multiple tools, which can process various materials according to their requirements. Using the **Independent Dual Extrusion System**, the production capacity can be doubled or materials of different properties can be processed in one printing session. High performance polymers as well as technical polymers or compounds can be stored and preconditioned in the **integrated dryer** for an enhanced print result.



Robust, Reliable and Organized

All components have been designed for continuous operation. **High-quality linear rails** and **servo motors** ensure high print quality and low maintenance requirements. Moreover, **tracking and switching** the nozzles and their dedicated materials can be done seamlessly. Switched nozzles are stored comfortably in the integrated tool drawer, while the printer remembers the matching of nozzle and material.



Process Integrity

Automatic bed leveling and sensors for monitoring the print process are essential for smooth printing. Successful multi-material prints require a precise print head alignment, which is achieved by an integrated **optical calibration** system. In addition, the integrated software tracks the status of consumables and maintenance parts.

Process Documentation

All important print process parameters are automatically recorded in a protocol. The user administration provides easy operation management and tracking.



User friendly

The integrated software is especially adapted to the P400 printer hardware and is proven to process high-performance polymers. The status of the printer can be checked at any time on site and via remote access.

Open System

The Apium P400 is an open platform. Therefore, there are no restrictions on using custom materials or slicing software of any kind. Self-developed print tools can be easily integrated as well.

Technical Support

With the experience of processing high performance polymers for almost a decade, Apium offers most **comprehensive service** and **support**.



Build Chamber

400x300x300 mm

Printer Size

1060x705x1941 mm

Printer Weight

260 kg

Machine Accuracy

7.5 μ m horizontal
1.0 μ m vertical

Nozzle Diameter

0.2 – 1.0 mm

Layer Thicknesses

0.05 – 0.6 mm

Wall Thickness

> 250 μ m

Printhead-Temp.

540°C

Adaptive Heating

500°C

Printbed-Temp.

200°C

Printbed-Material

Borosilikat Glass,
Stainless Steel

Dryer-Temp

150°C

Power Consumption

3600 W max.
230V, 50 Hz

Noise Emission

< 55 dB(A)

Data Formats

G-Code

Connectivity

WiFi*, Ethernet
*can be disabled

Materials

PEEK, PEEK-CFR,
PEEK-GFR, PEKK,
PP, PEI 9085, ABS,
PA6-CFR, PVDF,
PA6-GFR, etc.

Made in Germany

www.apiumtec.com | +49 721 13 20 95 0 | info@apiumtec.com