

# VSHAPER PRO

Prints created in VSHAPER PRO, widely popular in medicine, automotive and aerospace industries, are often used as alternatives to elements made of metal.

Monolithic construction, closed chamber and heated working platform provide full control over the process of cooling and welding subsequent paths. Additional emergency power supply guarantees continuous work of 3D Printers in industrial conditions.

3D Prints created with the use of VSHAPER PRO are characterized by high endurance during shock loading and when being stretched or bent. They are most commonly used by companies producing gear wheels, ring gears, rotor blades and heavily exploited machine parts.



*When choosing a device, we commissioned PEEK printing to many different producers of 3D Printers. The quality of VSHAPER prints was by far the best.*

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> PEEK Printing

> 450°C Printing Temperature

> Heated Table

> Isolated Heated Chamber

## Technical specification

## VSHAPER PRO

### Printing Parameters

- Printing technology Fused Filament Fabrication
- Workspace 270 x 270 x 200 mm
- Resolution 0.05 mm - 0.3 mm
- The accuracy of the position of layers 30 µm
- Positioning accuracy XY 11 µm / Z 2 µm
- Extruder Two exchangeable extruders **VPREC-PRO** and **VPREC-SINGLE**
- Print temperature Max 450°C
- Nozzle diameter Standard: 0.4 mm nozzle (Optional: 0.2, 0.6, 0.8, 1.0, 1.2)

### Working chamber

- Construction Closed (isolated, with constant temp. inside)
- Heating Yes (with active heating up to 70°C)
- Ventilation Yes (with carbon filter)

### Working platform

- Type Vacuum table
- Area Removable polymer surface
- Heating Yes (build platform temperature up to 150°C – ideal material adhesion)
- Auto leveling Yes

### Filament

- Filament diameter 1,75 mm
- Filament feeding accuracy 1 µm
- Automatic control of the beginning and the end of filament Yes
- Recommended materials for **VPREC-PRO** PEEK, PEI, PPSU
- Recommended materials for **VPREC-SINGLE** PLA, ABS, PMMA, PA, PC, PET-G, HIPS, PVA

### Mechanical and electrical parameters

- Construction Powdered steel
- Housing Powdered aluminium + anodized aluminium
- Z axis Ball screw
- XY axis Linear guides
- Engines NEMA17
- The volume of noise during printing < 40 dB
- Power supply 100-240V ~ 2A, 50-60 Hz

### Control

- Processor LPC1769 - ARM® Cortex®-M3 MCU 32 Bit
- Touch panel Yes
- Display Monochrome (128 x 64 px)
- Interfaces USB, SD Card, Ethernet

- Operating system Windows (7/8/10), Mac OSX (10.8/10.9), Linux (Ubuntu 10.04+)

### Dimensions and weight

- External dimensions 590 x 462 x 463 mm
- Weight 37 kg