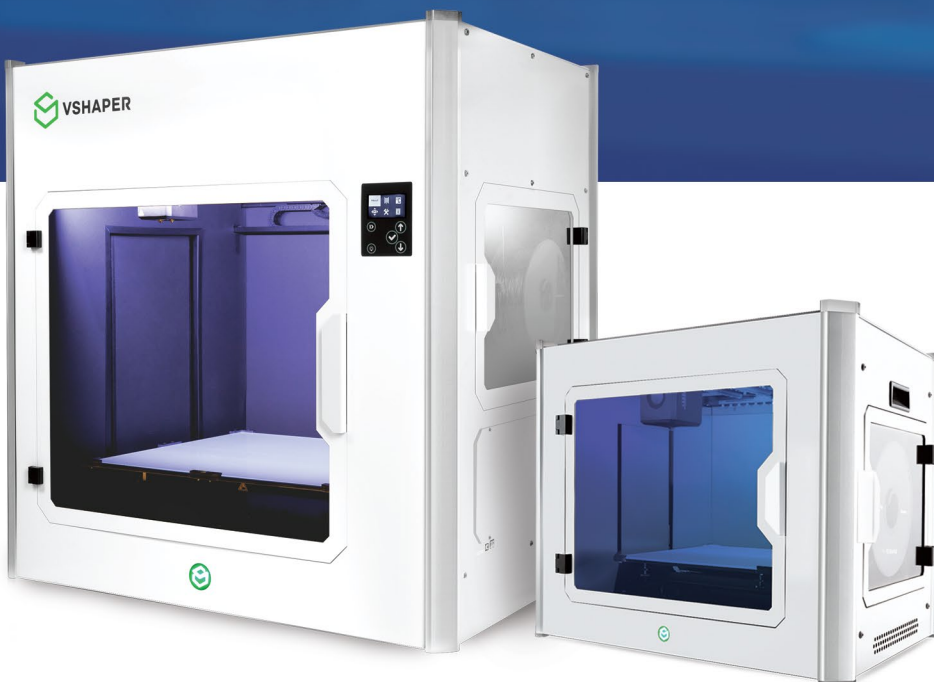


# VSHAPER MED

According to experts additive manufacturing is one of the techniques that will revolutionize the world of medicine. It is already used to aid the creation of dental crowns, bone parts, blood vessels and hip-joints prosthetics.

This type of prints enhance the preparation for surgery, even if they are not used in the procedure. More and more surgeons choose to practise on 3D Printed models in preparation for a complicated operation.

3D Printing is also used in aesthetic surgery, prosthetics and transplantation. With the use of 3D Prints it is possible to create perfectly fitted tooth crown, lighter and more hygienic cast counterpart as well as innovative bone prosthetics, enabling the substitution of body parts damaged in accidents or by complications from cancer.



*VSHAPER is the best available 3D Printer able to print high-performance polymers.*

**Rielson Falck**  
Helmholtz-Zentrum Geesthacht

➤ Isolated Heated Chamber

➤ Printing Temperature 450°C

➤ Door Lock

➤ Heated Table

## Technical specification

### Printing Parameters

- Printing technology ●
- Workspace ●
- Resolution ●
- The accuracy of the position of layers ●
- Positioning accuracy ●
- Extruder ●

- Print temperature ●
- Nozzle diameter ●

### Working chamber

- Construction ●
- Heating ●
- Sterilisation ●
- Ventilation ●
- Door lock ●

### Working platform

- Area ●
- Heating ●

### Filament

- Filament diameter ●
- Filament feeding accuracy ●
- Automatic control of the beginning and the end of filament ●
- Recommended materials for **VPREC-PRO** ●
- Recommended materials for **VPREC-SINGLE** ●

### Mechanical and electrical parameters

- Construction ●
- Housing ●
- Z axis ●
- XY axis ●
- Engines ●
- The volume of noise during printing ●
- Power supply ●

### Control

- Processor ●
- Touch panel ●
- Display ●
- Interfaces ●

### Software

- Files ●
- Control software ●

- Operating system ●

### Dimensions and weight

- External dimensions ●
- Weight ●

## VSHAPER 270 MED

Fused Filament Fabrication  
270 x 270 x 200 mm  
0.05 mm - 0.3 mm  
30 µm  
XY 11 µm / Z 2 µm  
Two exchangeable extruders **VPREC-PRO** or **VPREC-SINGLE**  
Max 450°C  
Standard: 0.4 mm nozzle  
(Optional: 0.2, 0.6, 0.8, 1.0, 1.2)

Closed (with constant temp. inside), made of stainless steel  
Yes (active heating up to 70°C)  
Yes (UV light)  
Yes (with HEPA filter)  
Yes

Hardened glass (with plastic surface)  
Yes (build platform temperature up to 150°C – ideal material adhesion)

1,75 mm  
1 µm  
Yes  
PEEK, PEI, PPSU  
PLA, ABS, PMMA, PA, PC, PET-G, HIPS, PVA

Powdered steel  
Silver-based antibacterial powder coatings  
Ball screw  
Linear guides  
NEMA17  
< 40 dB  
100-240V ~ 2A, 50-60 Hz

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

.obj .stl .amf .dae  
**SOFTSHAPER**  
Four-step code creation:

- Load model
- Set printing parameters
- Generate
- Confirm

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

590 x 462 x 463 mm  
37 kg

## VSHAPER 450 MED

Fused Filament Fabrication  
450 x 450 x 450 mm  
0.05 mm - 0.3 mm  
30 µm  
XY 11 µm / Z 2 µm  
Two exchangeable extruders **VPREC-PRO** or **VPREC-SINGLE**  
Max 450°C  
Standard: 0.4 mm nozzle  
(Optional: 0.2, 0.6, 0.8, 1.0, 1.2)

Closed (with constant temp. inside), isolated chamber  
Yes (active heating up to 70°C)  
Yes (UV light)  
Yes (with HEPA filter)  
Yes

Hardened glass (with plastic surface)  
Yes (build platform temperature up to 100°C – ideal material adhesion)

1,75 mm  
1 µm  
Yes  
PEEK, PEI, PPSU  
PLA, ABS, PMMA, PA, PC, PET-G, HIPS, PVA

Powdered steel  
Silver-based antibacterial powder coatings  
Ball screw  
Linear guides  
NEMA17, NEMA23  
< 40 dB  
100-240V ~ 2A, 50-60 Hz

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

.obj .stl .amf .dae  
**SOFTSHAPER**  
Four-step code creation:

- Load model
- Set printing parameters
- Generate
- Confirm

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

910 x 660 x 1890 mm  
160 kg