

Renfert

making work easy



SIMPLEX

NEW 3D filament printer

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SIMPLEX is a dental 3D-filament-printer. With the slicer software, which was specially developed for the dental sector, you can print models, which do not pose a risk to health, easily and reliably via the "Plug and Print" concept. The SIMPLEX 3D-filament-printer-system covers the entire range of orthodontic model fabrication. With its high dimensional accuracy, the SIMPLEX 3D-filament-printer ensures consistent, reproducible results. The 3D models produced do not require any post-processing.

Advantages

- Easy to use thanks to "Plug and Print" concept.
- Level resolution up to 50 µm grants precise results.
- Pleasant working with low noise level ≤ 49 dB.

Details

- SIMPLEX consisting of: SIMPLEX 3D filament printer, SIMPLEX sliceware, SIMPLEX print, SIMPLEX study model, Renfert CONNECT app.
- Process reliability thanks to filament monitoring system and automated troubleshooting.
- Intuitive touchscreen navigation.
- Safety thanks to closed building chamber, lockable door, and removable cover.
- Heatable print bed: optimal adhesion and simple cleaning.
- Simple handling thanks to removable print platform.
- Wi-Fi (currently EU and USA) for print control.
- Working with filaments that are harmless to health.



SIMPLEX sliceware is already installed with presets for orthodontic use

Technical data

Use	Fused Filament Fabrication (FFF)
Permissible mains voltage	90–264 V
Permissible mains frequency	50/60 Hz
Temperature range (Nozzle)	180–260 °C // 356–500 °F
Temperature range (Print bed)	50–110 °C // 122–230 °F
Layer resolution	≥50 µm
Number of extruders	Single
Type of extruder	All-Metal Hotend
Printing speed	50–200 mm/s
Position precision	4 x 4 x 2 µm
Weight (empty)	~16,3 kg // ~35.94 lbs
Dimensions (W x H x D) (Build volume)	250 x 200 x 200 mm // 10 x 8 x 8"
Dimensions (W x H x D) (Housing)	406 x 385 x 350 mm // 16 x 15.2 x 14"
Dimensions (W x H x D) (Device, exterior size)	415 x 635 x 500 mm // 16.3 x 25 x 19.7"
Diameter (Nozzle)	0,4 mm // 0.0016 "
Diameter (Filament)	1,75 mm // 0.0689 "

Ordering information

SIMPLEX with Wifi	No. 17350000
SIMPLEX	No. 17351000
Renfert CONNECT app	No. 12345678



NEW SIMPLEX Filaments

Filament for orthodontic model fabrication

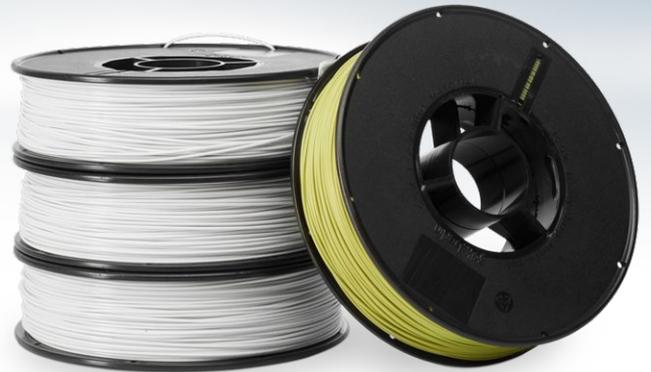
The high-quality special filaments are suitable for the specific requirements of the dental industry: they have excellent mechanical and physical properties and do not pose a risk to health. The high consistency and dimensional accuracy of the filaments enable detailed print quality. You receive a defined filament selection designed for the respective area of application.

Advantages

- Work at a high level with high quality materials.
- Work reliably with a selection of filaments matched to the indication area and printer.
- Time-saving and health-friendly fabrication of 3D models – no post-processing, no cleaning, no curing.

Details

- 100% free from irritants – no harmful vapors during printing process.
- Biofilament is recyclable and industrially compostable.
- Excellent mechanical and physical printing properties such as layer and print bed adhesion.
- High-quality, process-stable printing and detailed print result thanks to uniform diameter (1.75 mm) and roundness along the entire length of the filament.
- No post-processing with chemicals and curing unit necessary.
- Sustainable, environmentally friendly, and cost-effective printing.
- Colorfast, UV-resistant.
- Made in Germany.



Designed for complete orthodontic model fabrication



The model can be used as usual without the need for any post-processing



Accessories

3D Filament printing

	SIMPLEX study model	<p>The bio filament SIMPLEX study model offers high detail reproduction and sharpness for precise planning and diagnostic models. Promotes pleasant working, thanks to having no irritating components. Does not produce unpleasant vapors during the printing process, is recyclable and industrially compostable.</p> <p>For SIMPLEX</p>	<p>Bio filament Ø 1.75 mm, 1 x 800 g (28 oz.), white</p> <p>Printing temperature: 190-230°C (374-446°F) Bed temperature: 50-70°C (122-158°F)</p>	No. 17350100
	SIMPLEX working model	<p>The bio filament SIMPLEX working model is designed for the digital production of working models and offers high detail reproduction. Promotes pleasant working, thanks to having no irritating components. Does not produce unpleasant vapors during the printing process, is recyclable and industrially compostable.</p> <p>For SIMPLEX</p>	<p>Bio filament Ø 1.75 mm, 1 x 800 g (28 oz.), viridian green</p> <p>Print temperature: 190-230°C (374-446°F) Bed temperature: 50-70°C (122-158°F)</p>	No. 17350200
	SIMPLEX aligner model	<p>The special filament SIMPLEX aligner model is tailored to the special requirements of aligner production and the thermoforming technique*. Promotes pleasant working, thanks to having no irritating components. Generates no unpleasant vapors during the printing process. No post-processing, no annealing required.</p> <p>*For thermoforming foils with a foil thickness of ≤ 1.0 mm; excluded: Zendura Clear Aligner & Retainer Material</p> <p>For SIMPLEX</p>	<p>Heat-resistant special filament Ø 1.75 mm, 1 x 800 g (28 oz.), white</p> <p>Printing temperature: 235-255°C (455-491°F) Bed temperature: 80-95°C (176-203°F)</p>	No. 17350300
	SIMPLEX multi-use model	<p>The bio filament SIMPLEX multi-use model provides a natural surface effect with its high hard-gypsum content. Offers high detail reproduction for precise planning and diagnostic models. Promotes pleasant working, thanks to having no irritating components. Does not produce unpleasant vapors during the printing process, is recyclable and industrially compostable. It can be optimally worked with rotary instruments or a scalpel.</p> <p>For SIMPLEX</p>	<p>Plaster filament Ø 1.75 mm, 1 x 800 g (28 oz.), plaster white</p> <p>Printing temperature: 185-220°C (365-428°F) Bed temperature: 50-70°C (122-158°F)</p>	No. 17350600

