



# FabPro™ 1000 for Dental Applications

Entry-level dental solution with NextDent® dental materials for production of dental models and biocompatible surgical guides and orthodontic splints

The FabPro 1000 for Dental Applications produces high quality surgical guides, orthodontic splints, and dental models with precision and smooth finish. It is part of a comprehensive and trusted workflow with NextDent dental materials and post-processing in an easy-to-use solution with low operating costs.

# FabPro 1000 for Dental Applications

## ENTRY-LEVEL DENTAL 3D PRINTER



### PRECISION PRINTING

Digital Light Printing (DLP) technology uses a projector to image each layer within a photopolymer-based dental material for easy and precise printing, with the ability to build several smaller parts on a single platform for increased productivity. 3D Sprint® software for print preparation and management provides an easy user interface, and changing materials and post-processing is easy with comprehensive solutions.

### START TO FINISH WORKFLOW

The FabPro 1000 can be combined with other 3D Systems dental solution components to create a comprehensive and trusted workflow. This includes the LC-3DMixer for optimal stirring of materials, and the LC-3DPrint Box for UV post-curing.

### CERTIFIED AND BIOCOMPATIBLE MATERIALS

The FabPro 1000 is compatible with NextDent surgical guide, orthodontic splints and dental model materials. NextDent SG and Ortho Rigid materials are biocompatible and CE-certified, FDA listed and classified in accordance with the international medical device regulations, and part of our comprehensive and trusted workflow with the FabPro 1000 printer and post-processing accessories.

### LOWER COSTS, DELIVERED

Engineered for material efficiency and repeatability, the FabPro 1000 makes digital dentistry more accessible and affordable than ever before. And it's simple to use—from set-up to material loading, post-processing, cleaning and maintenance—making it a perfect entry-level solution.

# NextDent Dental Materials

The FabPro 1000 is optimized for printing surgical guides, dental models and orthodontic splints with NextDent dental materials:



## **NEXTDENT SG (SURGICAL GUIDE)**

A biocompatible Class I material, developed for printing surgical guides for dental implant surgery. This high precision material makes it easy to insert drill sleeves, directly after printing. The material can also be sterilized using standard autoclave protocols. Available in translucent orange.



## **NEXTDENT MODEL 1.0 OKER, MODEL 2.0 WHITE AND MODEL 2.0 PEACH**

A dental model material characterized by its high degree of accuracy, making it suitable for detailed master prosthodontic and orthodontic models where high precision is needed.



## **NEXTDENT ORTHO RIGID**

A biocompatible Class IIa material developed for digital manufacturing of splints. In combination with suitable software, it is possible to easily design and print splints. Available in transparent blue.

## Accessories

### **LC-3DPRINT BOX UV POST-CURING UNIT**

Post-curing is required in order to obtain the final material properties, and is a necessary step to produce a biocompatible end-product with NextDent materials. The LC-3DPrint Box is a revolutionary UV light box equipped with 12 UV light bulbs strategically placed inside to ensure a product is illuminated from all sides, which results in a quick and uniform curing cycle. Always follow the instructions for use relevant to the corresponding material.



### **LC-3DMIXER**

The LC-3DMixer keeps your NextDent 3D materials ready for use at any time at an optimum consistency. The LC-3DMixer is a roller/tilting stirring device for mixing 3D printing materials before pouring in the resin tray of the printer. Print resins must be mixed well, and handshaking is insufficient for highly filled and colored materials, and when mixed insufficiently color deviation and print failures may occur.

## System Properties

Printer size	43 x 43 x 61.2 cm (16.9 x 16.9 x 24.1 in)
Weight	37.5 kg (82.67 lbs)
Interface	Ethernet connection USB (direct printing)
Software	3D Sprint®
Power input	
Printer	24V DC, 3.75A
With adaptor	100-240V AC, 2A, 50/60 Hz
Package size	62 x 62 x 101 cm (24.5 x 24.5 x 39.75 in)
Package weight	55 kg (121 lbs) (including pallet)

## Printing Specifications

Build volume	125 x 70 x 120 mm (4.92 x 2.76 x 4.72 in)*	
Pixel Pitch	65 microns (0.0025 in) (390.8 effective DPI)	
Layer Thickness	50-100 microns (0.002 to 0.004 in) (material dependent)	
Wavelength	405 nm	
Vertical Build Speed	NextDent SG: NextDent Model 1.0 Oker: NextDent Model 2.0 White: NextDent Model 2.0 Peach: NextDent Ortho Rigid:	Up to 23.5 mm/hr (.93 in /hr) Up to 11 mm/hr (.43 in/hr) Up to 9 mm/hr at 50 microns Up to 11 mm/hr at 50 microns Up to 20 mm/hr at 100 microns

## Operating Environment

Temperature	18-28 °C (64-82 °F)
Humidity (RH)	30-70 %

## FabPro 1000 Dental Material Options

NextDent SG (Surgical Guide)	3D print resin for the manufacturing of dental surgical guides, biocompatible Class I material
NextDent Model 1.0 Oker, Model 2.0 Peach, Model 2.0 White	High-precision dental model material for printing detailed master prosthodontic and orthodontic models
NextDent Ortho Rigid	3D print resin for the manufacturing of dental splints, biocompatible Class IIa material

## Accessories

	LC-3DPrint Box	LC-3D Mixer
<b>Related Voltage</b>	110/230 V, 50/60 Hz, 2.6/1.3 A	100-240 V, 50/60 Hz
<b>Power consumption</b>	10 W	10 W
<b>Fuse</b>	250 V, T 2 A	250 V, T 2 A
<b>Dimension (WxLxH)</b>	41 x 44 x 38 cm	410 x 270 x 100 mm
<b>Weight</b>	22 kg	4 kg

\* Maximum part size is dependant on geometry, among other factors



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