## **3D SYSTEMS**



# FabPro<sup>™</sup> 1000 for Dental Applications

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

The FabPro 1000 for Dental Applications produces high quality surgical guides and dental models with precision and smooth finish. It is part of a comprehensive and trusted workflow with NextDent biocompatible 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<sup>™</sup> 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 and dental model materials. All NextDent 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 entrylevel solution.

## **NextDent Biocompatible Materials**

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

#### NEXTDENT SG (SURGICAL GUIDE)

A biocompatible Class I material, developed for printing surgical guides for 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**

A dental model material characterized by its high degree of accuracy, making this material suitable for detailed master prosthodontic and orthodontic models where high precision is needed. Model 1.0 Oker has an ideal surface for scanning.

### 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<br>USB (direct printing) |
| Software                               | 3D Sprint™                                   |
| Power input<br>Printer<br>With adaptor | 24V DC, 3.75A<br>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:<br>NextDent Model 1.0 Oker:                | Up to 23.5 mm/hr (.93 in /hr)<br>Up to 11 mm/hr (.43 in/hr) |  |

#### Operating Environment

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

#### FabPro 1000 Dental Material Options

| NextDent SG<br>(Surgical Guide) | 3D print resin for the manufacturing of dental surgical guides, biocompatible Class 1 material         |
|---------------------------------|--|
| NextDent Model 1.0 Oker         | High-precision dental model material for printing detailed master prosthodontic and orthodontic models |

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

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



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