NextDent® 5100

SYSTEM PROPERTIES	
Build Volume (xyz)	124.8 x 70.2 x 196 mm (4.9 x 2.8 x 7.7 in)
Resolution	1920 x 1080 pixel
Pixel Pitch	65 microns (0.0025 in) (390.8 effective PPI)
Wavelength	405 nm
Production Time for Full Arch Model	40 minutes to print a plate full of models
Operating Environment	
Temperature	18-28 °C (64-82 °F)
Humidity (RH)	20-80%
Electrical	100-240 VAC, 50/60 Hz, Single Phase, 4.0A
Dimensions (WxDxH)	
3D Printer crated	73.66 x 68.58 x 129.54 cm (29 x 27 x 51 in)
Pedestal crated	82.55 x 79.375 x 55.245 cm (32.5 x 31.25 x 21.75 in)
3D Printer uncrated	42.6 x 48.9 x 97.1 cm (16.7 x 19.25 x 38.22 in)
3D Printer + Pedestal uncrated	68.1 x 70.4 x 135.6 cm (26.8 x 27.71 x 53.38 in)
Weight	
3D Printer crated	59 kg (130 lbs)
Pedestal crated	26.3 kg (58 lbs)
3D Printer uncrated	34.5 kg (76 lbs)
3D Printer + Pedestal uncrated	54.4 kg (120 lbs)
Certifications	FCC, CE, EMC
Warranty	12 month manufacturer's warranty included. Extended warranty options available.

ACCESSORIES	
LC-3DPrint Box	Load capacity (WxDxH): 260 x 260 x 195 mm Dimensions (WxDxH): 41 x 44 x 38 cm Full light spectrum: 300-550 nm Controlled temperature for optimal curing Weight (uncrated): 22 kg Electrical: 110V/230V, 50/60 Hz, 2.6A/1.3A
LC-3DMixer (for mixing materials, purchase separately)	Dimensions (WxDxH): 410 x 270 x 100 mm Weight (uncrated): 4 kg Electrical: 100-240 V, 50/60 Hz

MATERIALS	
Build Materials	Materials specifications are listed on nextdent.com. For specific information about the available resins and colors for the NextDent 5100 please contact your authorized reseller or area sales manager.
Material Packaging	1kg bottles for manual pour

SOFTWARE AND NETWORK	
3D Sprint® Software	Easy build job set-up, submission and job queue management; Automatic part placement and build optimization tools; Part nesting capability; part editing tools; Automatic support generation; Job statistics
Connectivity	10/100/1000 Ethernet Interface
Client Hardware Recommendation	• 3 GHz multiple core processor (2 GHz Intel® or AMD® processor mini) with 8 GB RAM or more (4 GB mini) • OpenGL 3.2 and GLSL 1.50 support (OpenGL 2.1 and GLSL 1.20 mini), 1 GB video RAM or more, 1280 x 1024 (1280 x 960 mini) screen resolution or higher • SSD or 10,000 RPM hard disk drive (minimum requirement of 7 GB of available hard-disk space, additional 3 GB free disk space for cache) • Google Chrome or Internet Explorer 11 (Internet Explorer 9 mini) • Other: 3 button mouse with scroll, keyboard, Microsoft .NET Framework 4.6.1 installed with application
Client Operating System	Windows® 7 and newer (64-bit OS)
Input File Formats Supported	STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP and X_T

EXPERIENCE YOU CAN COUNT ON

3D Systems has leveraged its 30 years of 3D printing experience in combination with the leading developer of biocompatible dental 3D printing materials to deliver the NextDent 5100 solution. This complete solution represents industry-defining materials and print innovation, dental domain expertise, and regulatory compliance in all major markets to revolutionize your workflow.

NOTE Not all products and materials are available in all countries – please consult your local sales representative for availability.

Warranty/Disclaimer The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.

3dsystems.com/dental

NextDent LN5202302UK 11-23

NextDent® 5100

High-speed dental solution addressing the broadest range of applications with NextDent 3D printing materials

3D SYSTEMS

NextDent® 5100

High-speed dental 3D printer

UNPARALLELED ACCURACY AND PERFORMANCE

Powered by revolutionary Figure 4® 3D printing technology, the NextDent 5100 facilitates high-speed 3D printing for production of dental appliances and sacrificial castings, at a price point that is accessible to virtually all dental facilities.
The NextDent 5100 enables dental labs, clinics and production centres to produce dentures, crowns and bridges, models, surgical guides, orthodontic splints, retainers and trays with enhanced speed, precision, efficiency and lower cost.

NEXTDENT DENTAL MATERIALS FOR 3D PRINTING

Combined with a portfolio of 30 unique NextDent 3D printing materials* the NextDent 5100 addresses multiple dental applications. These materials are offered in a variety of aesthetic colors to closely match patients' teeth and gums. NextDent 3D printing materials for medical devices are biocompatible and CE certified in accordance with Medical Device Directive 93/42/EEC, listed at FDA, and registered in various other countries.

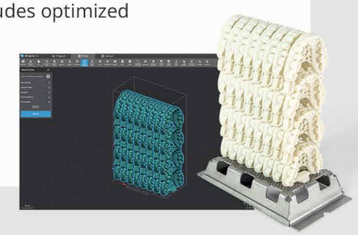
TRUSTED END-TO-END WORKFLOW

Fully compatible with industry-standard intra-oral scanning and software solutions, the NextDent 5100 delivers more precise results than conventional manual production techniques. Combine the printer with other 3D Systems dental solution components to create a comprehensive and trusted workflow.

3D Sprint®

End-to-end software solution for NextDent 5100 Printing workflows

NextDent 5100 printer uses 3D Sprint, 3D Systems' advanced software for file preparation, editing, printing and management from a single, easy-to-use interface. This software solution streamlines time to print, improves productivity and reduces printer downtime. 3D Sprint features automated part placement and support generation, and includes optimized workflows for printing stacked arches with one-click set up in the software for printing up to 30 arches in under 2 hours.



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 medical device 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 FROM 3D SYSTEMS

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. When mixed insufficiently color deviation and print failures may occur.

NextDent 3D Printing Materials

3D Systems' unique NextDent portfolio of 3D dental printing materials addressing multiple dental applications.

NextDent C&B Micro Filled Hybrid - biocompatible Class IIa material for crowns and bridges. Easy to finish and polish, available in 6 shades for perfect blending with existing teeth.

NextDent Try-In - biocompatible Class I material for printing Try-In devices to check bite registration and occlusion. Available in 3 shades.

CROWNTEC for NextDent - premium biocompatible Class IIa material, best in class properties for permanent restorations for crowns, inlays, onlays, veneers, and denture teeth.

NextDent Indirect Bonding Tray - biocompatible Class I flexible material for orthodontic applications. Available in color clear.

NextDent Ortho Rigid - biocompatible Class IIa material for easy design and manufacturing of splints. Available in transparent blue.

NextDent Ortho Flex - transparant biocompatible Class IIa material developed for 3D printed Dental Splints and Retainers. Characterised by a clear look, perfect accuracy and high degree of flexibility.

NextDent Model 2.0 - material for printing high-precision models for prosthodontic and orthodontic apllications and implant diagnostics. Available in colors Peach, White and Grey.

NextDent Gingiva Mask - flexible material for printing gingiva masks for dental models.

NextDent Cast - improved easy burn out material, residue-free and suited for all kinds of purposes. Design and cast the parts in the metal required.

NextDent Tray - high-quality material for the manufacturing of individual impression trays. Biocompatible Class I material. High printing speed and accuracy.

NextDent SG - biocompatible Class I material for printing Surgical Guides and high-precision transparent drilling templates.

NextDent Base - material for printing removable denture bases with high break resistance.

NEW

*Refer to your NextDent sales professional or NextDent Authorized Partner for NextDent materials available by country for the NextDent 5100 based on regulatory compliance by country.