Learn more at:
www.nexa3d.com

NXD 200

Ultrafast, Accurate and Reliable 3D Printer for Dental Manufacturing

Models

Surgical Guides

Custom Trays

Nightguards/Splints

Powered by next-generation LSPc technology with validated workflows

- Disruptive, modular and scalable Light Engine technology
- Edge-to-edge uniformity and accuracy
- High power and light transmission
- Real-time monitoring, optimizing and diagnostics
- Print at a speed of up to a model a minute
- Spacious Build Platform 275 x 155 x200mm
- 405 nm and 4K Resolution

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NXD 200 Dental Solution

A complete 3D printing solution superior in speed and workflow for large-scale dental production needs.

Large Build Plate Allows for Printing at a Speed of a Model a Minute

The NXE200 features 8.5L of build volume (measuring 10.8 in x 6.1 in x 7.8 in / 275 mm x 155 mm x 200 mm), an intelligent print optimization software, 4K resolution, and Nexa3D's revolutionary patented LSPc technology. Thanks to its cutting-edge technology the NXD200 provides isotropic printed parts, higher throughput, and lower cost per part making it the perfect 3D printing solution for any dental application.

Consistency with Every Build

Accuracy, uniformity and repeatability from edge to edge on the build platform.

Lab Ready + Modular Design

In addition to our highly reliable LSPc technology, the NXD 200 is crafted to be completely modular in design for easily interchangeable parts and technology upgrades eliminating hardware obsolescence.

Smart Integrated Workflow Software + Predictive Service

Nexa3D's internally developed intelligent software connects our hardware and materials together into a powerful, user friendly system while providing a new era of predictive and prescriptive service. It's as simple as pressing CRTL+P.

Our Speed + Our Reliability = Your Productivity

Validated Post Processing for Dental Applications

Nexa3D's xCure consistently and rapidly unlocks the full potential of your 3D prints regardless of size or complexity. xCure optimizes the curing of all resin-based parts to ensure consistent dimensional accuracy, robust structural integrity, and stronger molecular structures. It accommodates parts as large as 16 liters in volume. The chamber can hold up to three build plates at once and allows parts to cure directly on the build plate or be placed in a basket and cured individually. xCure's Perfect Part Optimization process consists of dual wavelength LEDs, multi-build plates, and parallel UV and thermal processing. xCure's validated end to end workflows drive the perfect balance of temperature, UV wavelength, and material-specific sequences to deliver the perfect cure. These optimal and effective curing cycles guarantee consistent mechanical properties and predictable part performance. The net result is, less post-processing time, faster time to market, better part performance, increased 3D printing productivity and of course – the perfect part.

Specifications	
Single click – rotate and push operation	External Dimensions (WDH) 21"x20"x32" | 53.34x50.80x 81.28cm
Validated resin presets for consistent part curing results	Internal Dimensions (WDH) 15.50"x 10.75"x25.75" | 39.37x 27.30x65.40cm
30-60C heating capacity with 1C increments	Weight 110lbs (empty) | 49.89 kg (empty)
6 dual wavelength 365 + 405 nm LEDs	US 100-120 VAC 60 HZ
Total input power of 360W ensures quick and efficient cycles	EU 200-240 VAC 50 HZ

Performance Dental Resins For Serious Production

Nexa3D offers an expanding range of high impact functional materials for the NXE 200 3D printer that are tailored to unleash performance and productivity by taking 3D printing from dial-up internet to broadband speed, making our solutions ideal for serious production and same day prototypes.

KeyModel Ultra

Model material for thermoforming and removal die and model application.

KeySplint Soft

Splint material for splints, night guards and bleaching trays.

KeyGuide

Guide material for surgical guides.

KeyTray

Tray resin for creating customized impression trays.

Performance Dental Resins

Properties	KeyModel Ultra	KeySplint Soft	KeyGuide	KeyTray
Tensile Elongation at Break/D638	5%	110%		26%
Tensile Modulus/ASTM D638	1700 MPa			2056 MPa
Ultimate Tensile Strength/D638	50 MPa		1100 MPa	62 MPa
Flex Modulus/ASTM D790	1940 MPa	1100 MPa	2400 MPa	1913 MPa
Flex Strength/ASTM D790	70 MPa	44 MPa	105 MPa	85 MPa
Flex Modulus/ISO 20795-2		135 MPa		
Flex Strength/ISO 20795-2		2.6 MPa		
Hardness (Shore D)/ASTM D2240		80		86
HDT @0.45 MPa/ASTM D648		32°C		
Sorption/ISO 20795-2		<18 µg/mm^3		
Solubility/ISO 20795-2		<4.8 µg/mm^3		
Free Monomer Extraction		<2.2%		
Cytotoxicity/ISO 10993		Pass		
Irritation/ISO 10993		Pass		
Sensitization/ISO 10993		Pass		
Biocompatibility/ISO 10993-5			Pass	
Biocompatibility/ISO 10993-10			Pass	

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. Nexa3D makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.

Printer Hardware

Build Volume (xyz)	275 x 155 x 200mm (10.8 x 6.1 x 7.8 inch)
Max Resolution	4K resolution
Pixel Pitch	76.5 µm (0.0030 in)
Wavelength	405 nm
Build Materials	UV Curable Plastics: KeyModel Ultra, KeySplint Soft, KeyGuide, KeyTray
Material Packaging	5kg jerry can

Operating Environment	
Air Temperature	20-25˚C (60-80˚F)
Humidity	RH below 70%
Electrical	NA Version : 100-120 VAC, 50/60 Hz, Single Phase, 8A (NEMA 15-5R) EU Version: 210-230 VAC, 50/60 Hz, Single Phase, 4A (CEE 7/7)

Dimensions (WxDxH)	
3D Printer crated	990 x 990 x 1905mm (39 x 39 x 75 inch)
3D Printer uncrated	710 x 710 x 1675 mm (28 x 28 x 66 inch)

Weight	
3D Printer crated	250 kg (550lb)
3D Printer uncrated	160kg (350lb)

Materialise MagicsPrint for Nexa3D Software	Full-featured toolset including auto orientation and nesting, auto support generation, mesh repair wizard, and part editing
NexaX v1 Software	Easy build processing and Remote Printer Management: submission and queues, job statistics
Connectivity	GigaBit Ethernet RJ-45 & WiFi Interface
Client Hardware Recommendation	- 3 GHz multiple-core processor with 16+ GB RAM - NVIDIA GTX 1060 or AMD Radeon RX 480 or better graphics with 4+ GB RAM - 3 GB available HDD space, additional 10GB for files / cache
Client Operating System	Windows 10, 64bit
Input Data File Formats Supported	.stl, .3mf
Post-Processing	Ships with basic part finishing tools accessory kit. - Max build requires wash basin & cure chamber with 300 x 180 x 480mm (12 x 7 x 19 in) capacity - Requires UV curing unit capable of > 2mW/cm2 and 60°C (ideal 20mW/cm2 and up to 120°C)

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