



NXD 200

Ultrafast, Accurate, and Reliable
3D Printer for Dental Manufacturing

**Powered by next-generation LSPc technology
with validated workflows**

- Higher throughput for better profitability
- FDA-cleared materials
- Disruptive, modular and scalable Light Engine technology
- Edge-to-edge uniformity and accuracy
- Print up to 20 flat models in 30 minutes
- Spacious build platform 275 x 155 x 200 mm
- 4K resolution for great fit and impressive finish

Orthodontic Models



Custom Trays



Surgical Guides



Occlusal Guards/Splints





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 High Throughput

The NXD 200 features 8.5L of build volume (measuring 10.8 x 6.1 x 7.8 in / 275 x 155 x 200 mm), an intelligent print optimization software, 4K resolution, and Nexa3D's revolutionary patented LSPc technology. Thanks to its cutting-edge technology the NXD 200 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 CTRL+P.

[Learn More](#)

The NXD 200's Reliability, Speed, and Accuracy = 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 to drive the ideal 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 – exceptional parts.

Specifications

Single click – rotate and push operation	External Dimensions (WDH) 21 x 20 x 32 in. 53.34 x 50.80 x 81.28 cm
Validated resin presets for consistent part curing results	Internal Dimensions (WDH) 15.50 x 10.75 x 25.75 in. 39.37 x 27.30 x 65.40 cm
30-60°C heating capacity with 1°C increments	Weight 110 lbs. (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 functional materials for the NXD 200 3D printer that are tailored to unleash performance and productivity making our solutions ideal for serious production and same-day prototypes.

	<p>xModel 2505</p> <p>Model material for thermoforming and removal die and model application.</p>
	<p>KeySplint Soft</p> <p>Splint material for splints, night guards and bleaching trays.</p>
	<p>KeyGuide</p> <p>Guide material for surgical guides.</p>
	<p>KeyTray</p> <p>Tray resin for creating customized impression trays.</p>

Performance Dental Resins

Properties	xModel 2505	KeySplint Soft	KeyGuide	KeyTray
Tensile Elongation at Break/D638	4%	110%		26%
Tensile Modulus/ASTM D638	2500 MPa			2056 MPa
Ultimate Tensile Strength/D638	54 MPa		1100 MPa	62 MPa
Flex Modulus/ASTM D790	2100 MPa	1100 MPa	2400 MPa	1913 MPa
Flex Strength/ASTM D790	80 MPa	44 MPa	105 MPa	85 MPa
Flex Modulus/ISO 20795-2		135 MPa		
Flex Strength/ISO 20795-2	73 MPa	2.6 MPa		
Hardness (Shore D)/ASTM D2240		80		86
HDT @0.45 MPa/ASTM D648		32°C		
Sorption/ISO 20795-2		<18 µg/mm³		
Solubility/ISO 20795-2		<4.8 µg/mm³		
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 200 mm (10.8 x 6.1 x 7.8 inch)
Max Resolution	4K resolution
Pixel Pitch	76.5 µm (0.0030 in)
Wavelength	405 nm

Operating Environment	
Air Temperature	20–25°C (68–77°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 1905 mm (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)

NexaX 2.0	Easy build processing and Remote Printer Management: submission and queues, job statistics
Connectivity	GigaBit Ethernet RJ-45 & WiFi Interface
Client Hardware Recommendation	<ul style="list-style-type: none"> 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	<p>Ships with basic part finishing tools accessory kit.</p> <ul style="list-style-type: none"> 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