Choosing the Right Industrial 3D Printer

From desktop 3D printing to additive manufacturing, we offer a full line of ultrafast 3D printing solutions that deliver unmatched speed, increase production throughput, and lower total cost of ownership.

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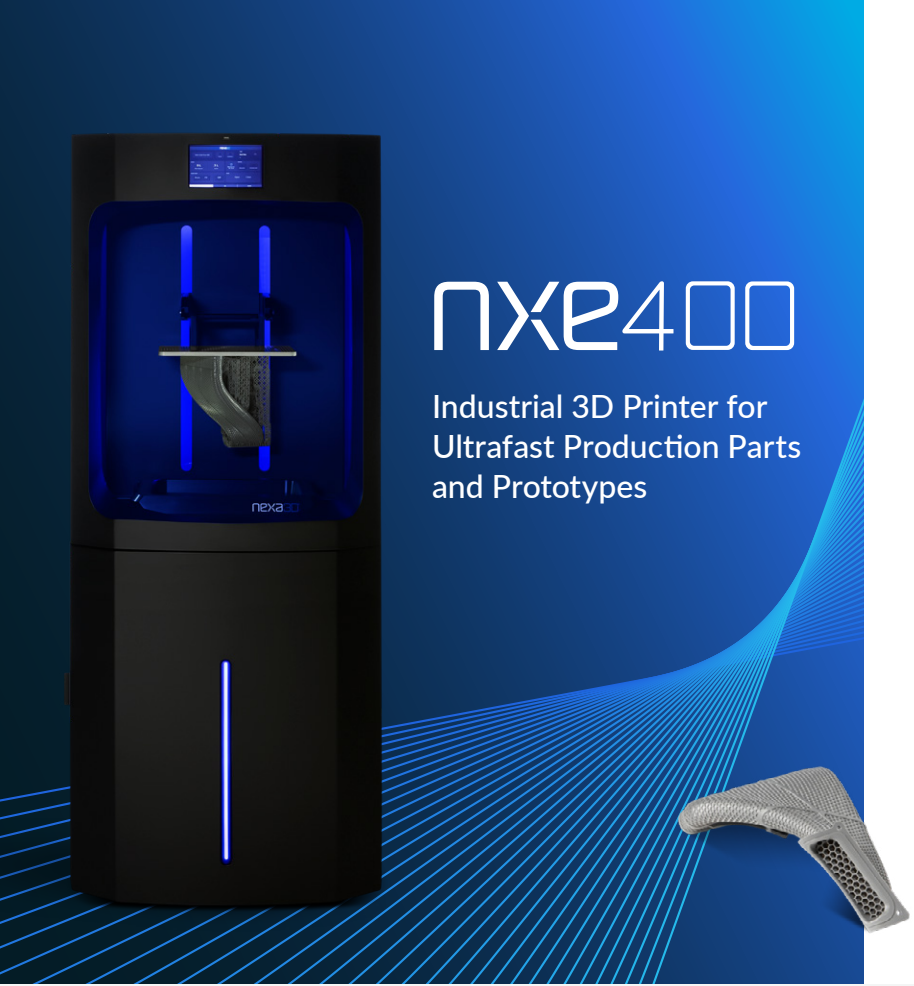


nxe400

Industrial 3D Printer for Ultrafast Production Parts and Prototypes

Key Features

Precision high speed additive manufacturing

With the patented LSPc™ Technology you can print up to 6.5x faster for ultrafast production of accurate, repeatable parts.

Large, versatile build volume

10.8 x 6.1 x 15.7 inch
(275 x 155 x 400 mm)

Robust, high-performance materials portfolio

The NXE 400 is open source and compatible with various resin materials, including xPEEK, xABS, and xFLEX.

Edge-to-edge uniformity and accuracy with 4K resolution

Count on part-to-part consistency across the full build volume without light diffusion near part edges.

NXE400

Accessibility

For designers, engineers, and manufacturers who need fast, accurate, and scalable prototyping and manufacturing solutions, the NXE 400 is an industrial 3D printer that delivers incredible speed, premium production capabilities, and exceptional productivity. With the NXE 400 you gain the ability to design, iterate, and take a product to market faster - and all with the same manufacturing technology.

6.5x Greater Print Speed with LSPc Technology

Nexa3D's patented 3D printing LSPc process enables production speeds that are up to 6.5x faster than other 3D printers from the same class. Different from DLP, where edge-to-edge performance can be compromised, LSPc delivers a uniform, high power and distortion-free image to all areas of the build plate to ensure part-to-part accuracy and uniformity. Nexa3D's self-lubricated, Everlast-2 membrane overcomes the delamination forces that accrue during any inverted, vat based printing process, thus enabling the fastest printing speed found on the market today.

2.5x Larger Build Volume

Featuring 2.5x greater build volume (16L) compared to SLA and DLP-based technologies, the NXE 400 photopolymer 3D printer allows for much larger parts, higher part throughput, and ultimately lower part cost — all with higher resolution pixels (76.5 µm) and isotropic prints.

Manufacturing Ready & Modular Design

Built from industrial hardware with modular components, the 3D printer is easy to service and simple to upgrade, resulting in a long-lasting, reliable machine.

Next-Gen Software + Predictive Service

Nexa3D's very own NexaX software connects our hardware and materials together into a powerful, user friendly system while providing a new era of predictive and prescriptive service. Our software tools include validated workflows that are coded into our digital thread and include an intuitively guided print prep and execution system, and our validated workflows include material and geometry-specific wash and cure cycles.

High Performance Materials

Nexa3D's robust materials portfolio is backed by strong partnerships with leading material providers including Henkel and BASF. Our resin 3D printing materials are tailored to the LSPc process to deliver ultrafast speed, durability and accuracy. Getting the most out of our ultrafast LSPc technology is enabled by this broad range of fully validated materials, which are formulated to provide unprecedented print speed as well as part characteristics required for optimal mechanical performance. This includes general purpose resins for prototyping or tooling as well as high performance resins like xPeek for high temperature environments or xPP for exceptional elongation characteristics.

Best For:

- functional prototyping
- jigs
- fixtures
- on-demand manufacturing of final components

NXE 400 | NXE 200 | NXD 200 | XiP | QLS 820 | xWASH | xCURE

Printer Hardware

Build Volume (xyz)	275 x 155 x 400 mm (10.8 x 6.1 x 15.7 inch)
Pixel Pitch	76.5 µm (0.0030 in)
Max Resolution	4K (3840 x 2160)
Wavelength	405 nm
Material Packaging	5kg jerry can

Operating Environment	
Air Temperature	20–25˚C (68–77˚F)
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)
Humidity	RH below 70%

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

NexaX Software	Full-featured software tool set providing auto-orientation and nesting, automatic support generation, easy build processing, and remote printer management including build submission, queue visibility, and 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

nxe200

Exceptional speed and productivity in an affordable industrial 3D printer

Key Features

Precision high speed additive manufacturing

With the patented LSPc™ Technology you can print up to 6.5x faster for ultrafast production of accurate, repeatable parts.

Large, versatile build volume

10.8 x 6.1 x 15.7 inch
(275 x 155 x 400 mm)

Robust, high-performance materials portfolio

The NXE 400 is open source and compatible with various resin materials, including xPEEK, xABS, and xFLEX.

Edge-to-edge uniformity and accuracy with 4K resolution

Count on part-to-part consistency across the full build volume without light diffusion near part edges.

NXE200

Accessibility

For designers, engineers, and manufacturers who need fast, accurate, and scalable prototyping and manufacturing solutions, the NXE 200 is an industrial 3D printer that delivers incredible speed, premium production capabilities, and exceptional productivity without the major capital expense. With the NXE 200 you gain the ability to design, iterate, and take a product to market faster - and all with the same manufacturing technology.

Ultrafast Printing with LSPc Technology

Different from DLP, where edge-to-edge performance can be compromised, LSPc delivers a uniform, high power and distortion-free image to all areas of the build plate to ensure part-to-part accuracy and uniformity. Our self-lubricated, Everlast-2 membrane overcomes the delamination forces that accrue during any inverted, vat based printing process, thus enabling the fastest printing speed found today in the market.

A Larger Build Volume

Its 200mm z-stroke is perfect for building smaller parts as well as enabling downstream processes for semi-continuous production. Unlike other DLP or mSLA technologies, the NXE 200 gives users a large 8.5L build volume and proven workflow to unlock the highest throughput in its class at the lowest total cost of ownership.

Manufacturing Ready & Modular Design

The affordability of the NXE 200 goes beyond its price point. Built from industrial hardware with modular components, the 3D printer is easy to service and simple to upgrade, resulting in a long-lasting, reliable machine.

NXD200

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

Key Features

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 consistency across the full build volume without light diffusion near part edges

NXD200 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 CRTL+P.

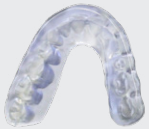
The NXD 200's Reliability, Speed, and Accuracy = Your Productivity

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.

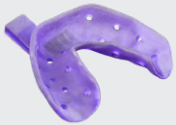


KeySplint Soft

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

XiP

Ultrafast Desktop
Resin 3D Printer

Key Features

Powered by Nexa3D's proprietary Lubricant Sublayer Photo-curing (LSPc) Technology, breaking the speed barrier in 3D printing

- Proprietary Everlast-2 Membrane delivers enhanced part quality at superior speed
- Print at speeds of up to 18 cm per hour
- Generous 4.8L build volume (190 x 120 x 210 mm)
- Modular, 4K resolution mono LCD and advanced UV light engine combine for uniform and consistent prints
- Open materials platform for ultimate accessibility
- Quick-change resin system to easily swap materials
- Sleek industrial design with robust components and consumer-grade experience

XiP

Your Complete Desktop Solution

- Intelligent NexaX Software enables intuitive workflow and access to open materials platform
- With XiP, you really can have it all - speed, productivity, quality, ease-of-use, and affordability
- All-in-one automated post processing system for washing and curing parts

Desktop printing without compromises.

Printer Specifications	
Technology	• Lubricant Sublayer Photo-curing (LSPc); Everlast-2 membrane
Build Volume	• **X:** 190 mm (7.5”), **Y:** 120 mm (4.7”), **Z:** 210 mm (8.6”) • 4.8 liters print volume
Light Engine	• 405 nm LED array w/ collimating lens • Modular 9.3” Monochrome 4K LCD Mask
Resolution	• 0.050 mm (.002”) / 0.100 mm (.004”) / 0.200 mm (.008”) • **Pixel Size:** 52µm
Resin System	• Automatic Gravity Feed Cartridge w/ Vat Level Sensing • Smart NFC bottle and resin vat/membrane • Auto electromagnet vat clamping; quick release build plate • Stackable vat storage • Built-in spill containment

Hardware	• Billet aluminum enclosure
	• 420mm (16.5”) W x 350mm (14”) D x 530mm (21”) H
	• 5.5” Color HD OLED Touchscreen Display
	• Z-Stage
	  • Rigid parallel linear rails
	  • Recirculating ballscrew
	• Ethernet / USB / Wi-Fi connectivity

Software	• NexaX 2.3 Basic or NexaX 2.3 Pro for XiP • **Supported File types:** .stl, .obj, .3mf • **Operating Systems:** Windows 10/11, MacOS *(coming soon)*
Operating Environment	• **Electrical Input:** 100-240VAC, 50/60Hz • **Ambient Temperature:** 20-25 degrees C • **Humidity:** Below 70%

Performance Resins

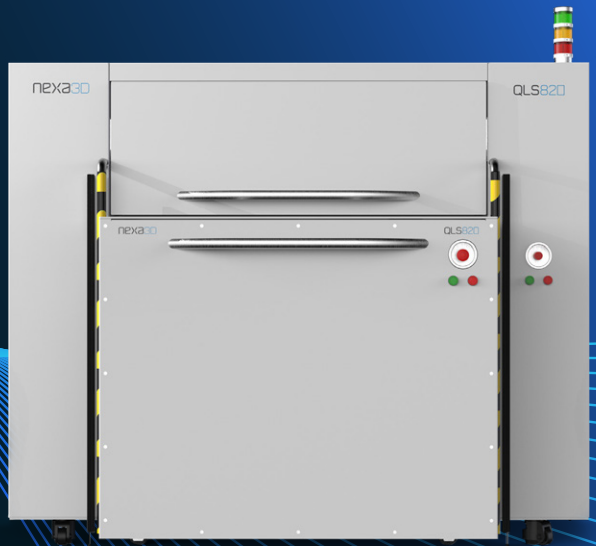
Nexa3D partners with the world’s leading material providers to offer an expanding range of high-performance resins fully validated for XiP to unleash a wide range of print applications.

Resin Name	Function	Properties
xPro410 (Black)	General Purpose Prototyping	Best value Matte black
xCE (Black)	Functional / End Use	High Temp Stiff High Flex strength
xABS3843 (Black)	Functional / End Use	Tough ABS-like
xPP405 (Black)	Functional / End Use	Durable PP-like
xPEEK147 (Black)	Functional / End Use	Very High Temp Very Stiff
KeyModel Ultra (Ivory)	Dental modeling	Accurate; Easy thermoforming

Ask us about accessing additional materials not yet validated through our Open Mode.

QLS820

An industrial 3D Printer built for serialized production



Key Features

Highest throughput in its class

Prints up to an impressive 8 liters/hour and can deliver an average 20% build density. The QLS 820 brings you the highest part throughput of any polymer powder bed fusion technology.

Automation-ready architecture

The QLS 820 is designed to keep printing. Featuring Siemens PLC factory automation controls with an exchangeable build unit to keep your printer doing what it does best - manufacturing high quality parts.

Open Platform with inert, high-temperature capabilities

You control material choice and build parameters, including production temperatures up to 230°C. Leverage our validated materials to get printing quickly.

Robust, scalable manufacturing

Gain more flexibility and ease of use. With removable build units and modular material processing, your adaptive printer fleet is built to accommodate your growing manufacturing needs.

QLS820

A fast, accurate, and scalable production solution

Redefining Speed in Manufacturing

At the core of the QLS 820 is Nexa3D's powerful Quantum Laser Sintering, a new powder bed fusion technology that combines ultrafast printing, automation-ready hardware and material handling platforms, with powerful software controls to help you achieve production volumes that are orders of magnitude greater than those of other thermoplastic 3D printing technologies.

Scalable Production Solutions

With an automation-ready architecture and advanced fleet management software, the QLS 820 is designed to be scaled for production. Simply add a new build unit to take advantage of the full production capacity of your printer throughout the day, and you can also add material processing modules to your MMPS as your material needs expand.

Centralized Data and Analytics

Leverage centralized printer management and real-time data monitoring via remote access to gain more flexibility with your printers. The QLS 820 web dashboard enables end-to-end traceability with centralized printer management and real-time data monitoring, and can also provide historical data analytics to help you easily keep track of printer performance.

Gain more flexibility and ease of use with remote access to your printer fleet via the printer hub monitor, your computer, or a mobile device.

Modular Materials Processing Station

The QLS 820 features a modular material processing station (MMPS). From powder containment and blending to breakout, powder reclamation and sieving, the MMPS offers a scalable solution that ensures safe, clean, and efficient material handling across all material operations.

Technical Data

Dimensions (Closed)	200x140x200cm
Weight	750kg
Power Requirements	26 kWatt
Operating Temperature	+5°C/+25°C
Interface	Web Dashboard
Laser Type	4x100W CO2
Material Delivery	Removable Build Unit
Additional Equipment	Power handling and refreshing station
Z. Resolution	50-200 microns
Building Volume	350x350x400mm
Printing Speed	Up to 8 liters per hour up to 20% average job density

xWASH

Nexa3D's xWASH matches the build volumes and process requirements of the ultrafast NXE400 3D printer, and is engineered for Nexa3D's photoplastic materials, giving manufacturers a powerful, consistent, and sustainable washing solution.

Key Features

Simple Operation

Touch screen user interface with color display

Functional

35L Tritan reservoir with drain/fill ports

Efficient

Bidirectional magnetic stirrer agitation with variable speeds

Intuitive Workflow

Adjustable cleaning cycle timer and cleaner saturation timer

Convenient

Accepts 2x NXE 400/NXD 200 build platforms, and/or loose parts basket

Sustainable

Reduce cost and environmental impact with Nexa xClean part washing solution

Technical Data

Dimensions L x W x H	400 x 420 x 860mm
Weight	60kg (wet)
Reservoir Capacity	35L
Maximum part capacity	275 x 155 x 400mm
Weight	7kg
Agitation Method	Magnetic impeller, variable speed
Power Supply	110-240VAC 50/60Hz
Recommended Operating Temperature	+10 °C to +40 °C (+50 °F to +104 °F)

xCURE

Nexa3D's xCURE 3D printing post-processing solution optimizes the curing of all resin-based parts to ensure consistent dimensional accuracy, robust structural integrity, and stronger molecular structures.

Key Features

Simple Operation

LCD screen interface with a rotary knob and push operation

Efficient

365+405 nanometer wavelength LED's deliver a broad spectrum of Nexa3D resin initiator coverage

Maximum Coverage

6 LED strips that provide 360° of coverage with reflective interior to optimize uniformity

Intuitive Workflow

Resin profile pre-settings for Nexa3D resins, as well as custom user input option

Upgradeable

Updates can be done with a file, a computer and USB cable

Convenient

Part loading flexibility: option to load loose parts on a shelf or parts printed on a build plate

Functional

Operation options: light only, heat only, or light and heat combination

Specifications

Single click – rotate and push operation	External Dimensions (WDH) 21x20x32 in. / 53.34x50.80x81.28cm
Validated resin pre-setts for consistent part curing results	Internal Dimensions (WDH) 15.50x 10.75x25.75 in. 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

Nexa3D.com