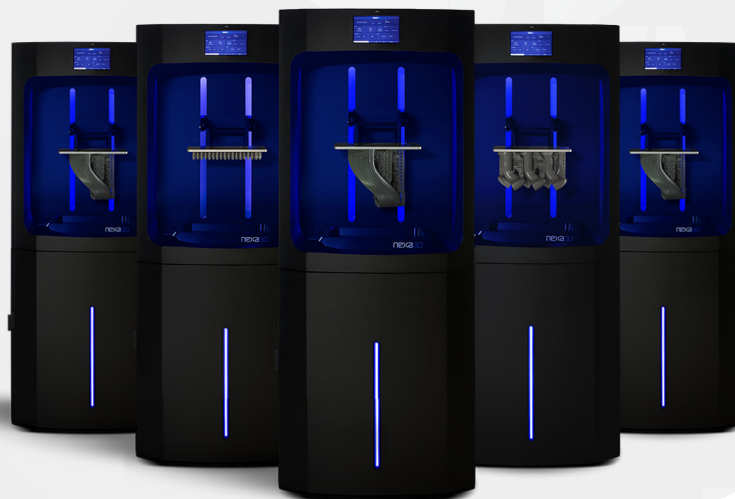


NXE 400 3D Printer is Breaking Additive Industry Productivity Performance and Cost Barriers



NXE 400 3D printer delivers best in breed print size, volume and speed at the lowest cost of ownership, making it ideal for series production and same day on-demand parts and prototypes.



See what the World's Fastest Industrial 3D Printer can Do For Your Business

NXE 400

With an unprecedented 16L build volume measuring 10.8 in x 6.3 in x 15.7 in (27.5 cm x 15.5 cm x 40 cm), intelligent optimization, and Nexa3D's revolutionary patented LSPc technology, the NXE 400 is the perfect printer for any application.

2.5x Larger Build Volume

The NXE 400 features more than double the build volume compared to currently available technologies, allowing for much larger parts, higher part throughput, and ultimately lower part cost, all with the higher-resolution pixels (75 μm) and isotropic prints.

Manufacturing Ready + Modular Design

In addition to our highly reliable LSPc technology, the NXE 400 is crafted to be completely modular in design for easily interchangeable parts and technology upgrades eliminating hardware obsolescence.

Next-Gen 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.

Maximize Part Quality and Yield

The NXE 400 is the next scalable manufacturing solution with additional washing and curing units capable of handling even the largest 16L parts on a single tray making the NXE 400 the most advanced printing solution in its class. The washing and curing units are also capable of handling both single large prints and a combination of smaller parts with multiple trays to create finished parts in a matter of minutes in what would normally take hours with today's available technologies reducing labor costs and post processing times.

Smart and Connected

Our software tools, include validated workflows that are coded into our digital thread and include intuitively guided print prep and execution system. Machine learning and vision provide adaptive print process and real-time monitoring for optimal yield and quality. Our validated workflows include material and geometry specific prescribed wash and cure cycles.

[Book your live demo now](#)
[Get your sample part here](#)



Validated Post Process Tools And Processes

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 pre-sets 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

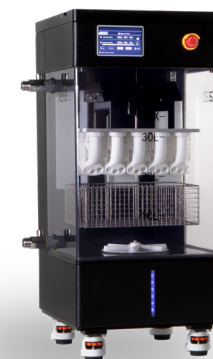
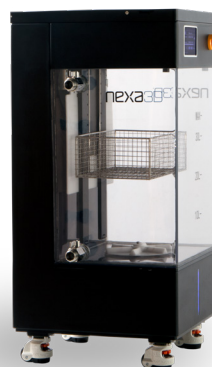
xWASH

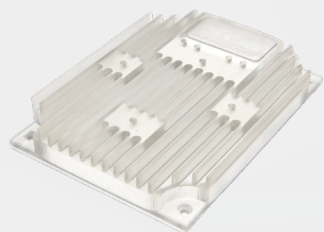
Nexa3D's xWASH matches the build volumes and process requirements of the ultrafast NXE400 3D printer, and is engineered for Nexa3D's photoplastic materials, giving manufacturers a **powerful, consistent, and sustainable washing solution**.

The xWASH is optimized for and validated with **Nexa xClean**, which offers 3X saturation limits, environmentally friendly recycling options, and enhanced chemical/flash-point safety characteristics.

The xWASH directly accommodates the full NXE400 build volume, accepts **up to two NXE400 build platforms simultaneously** for streamlined post-processing workflow, or the option of a loose parts basket for production flexibility; it can also accept the full NXE400 build volume. Bi-directional agitation with variable speeds ensures efficient cleaning regardless of part geometry, and an adjustable cleaning timer allows optimized cleaning time based on part geometry and resin type. **Dedicated drain and fill ports** facilitate easy maintenance; a pot life timer notifies when the cleaner has reached saturation limits. A tritan plastic reservoir provides **clear process and cleaner level viewing**, and provides **maximum durability** for production environments.

The ability to **automatically raise and lower the Z-axis** with a secondary lid/cover provides an extra safeguard from chemical exposure, and reduces solvent evaporation. A **touch screen** user interface makes it easy to set bath cleaning duration, agitation speed/direction, and cleaner useful life.





Key Features

SIMPLE OPERATION

Touch screen user interface with color display

EFFICIENT

Bidirectional magnetic stirrer agitation with variable speeds

CONVENIENT

Accepts 2x NXE400/NXD200 build platforms, and/or loose parts basket

FUNCTIONAL

35L Tritan reservoir with drain/fill ports

INTUITIVE WORKFLOW

Adjustable cleaning cycle timer and cleaner saturation timer

SUSTAINABLE

Reduce cost and environmental impact with Nexa xCLEAN part washing solution

Technical Data

Overall Dimensions

L x W x H: 400 x 420 x 860mm

Weight 60kg (wet)

Reservoir Capacity: 35L

Maximum part capacity

L x W x H 275 x 155 x 400mm

Weight 7kg

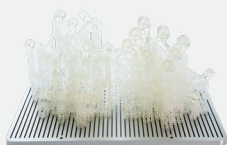
Agitation Method Magnetic impeller, variable speed

Power Supply 110-240VAC 50/60Hz

Recommended Operating Temperature +10 °C to +40 °C (+50 °F to +104 °F)

Performance Photoplastics For Series Production

Nexa3D offers an expanding range of high impact functional materials for the NXE 400 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 series production and same day prototypes.



xGPP-Translucent

Fast, medium-viscous resin suitable for translucent, rigid, multipurpose high performance parts. Parts produced with this resin show no water uptake and low shrinkage. xGPP Translucent is great for demo parts, large parts, performance prototypes, fluid flow models, electrical casings, functional enduse parts and snap parts.



xGPP-Gray

Tailored to provide great surface finish and incredibly true to design details, the xGPP-Gray is ideal for texture reach models. With matt finish and high accuracy this resin will provide great visualization of fine structures and features. Ideal for visual models and rapid prototype parts.



xCE-White

High performance polymer for producing end-use plastic parts and injection molding tools in minutes. Nexa3D's new material is the fastest single cure polymer boasting higher flexural strength compared to those typically achieved only in dual cure cyanate ester resins. xCE-White has excellent isotropic properties and exhibit long-term environmental stability.



xCE-Black

High performance polymer for producing end-use plastic parts and injection molding tools in minutes. Nexa3D's new material is a single cure polymer that delivers higher flexural strength compared to those typically achieved only in dual cure cyanate ester resins. xCE-Black has excellent isotropic properties and exhibit long-term environmental stability.



3843 xABS Black

High performance, high modulus material that boasts excellent flexural and tensile physical properties with a relatively high degree of elongation. 3843-ABS-Black is a low-shrinkage and high toughness material, enabling it to print accurately and function in a wide variety of applications including robotics and automation machinery, vehicle components, and end-use parts.



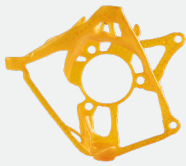
xMED412

xMED412 is polypropylene-like material that is ideal for manufacturing a variety of biocompatible, medical and wearable devices. xMED412 is based on Henkel's Loctite® MED412 material and is covered by all of its associated clearances, tests and certifications.



xPRO410

xPRO410 is a rigid photoplastic that prints parts with extreme accuracy and an exceptional surface finish. Formulated based on Henkel's LOCTITE® PRO410 polymer and optimized for Nexa3D's NXE400 3D printer, the material is ideal for general purpose prototyping and series production.



xCast

xCast is tailored specifically for the production of precision investment casting patterns on the NXE400 3D printer. xCast is a much more economical and scalable alternative to all other direct and indirect metal 3D printing solutions on the market today.



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.



xPP405-Black

A tough, impact-resistant material with a modulus similar to molded unfilled polypropylene. Exhibits excellent weathering characteristics and UV stability making it suitable for end-use part applications.



xPP405-Clear

A tough, impact-resistant material with a modulus similar to molded unfilled polypropylene. Exhibits excellent weathering characteristics and UV stability making it suitable for end-use part applications.



xPEEK147

A stiff, heat-resistant material with a HDT of 230°C similar to many PAEK thermoplastics like PEEK. Exhibits excellent long-term stability at temperatures exceeding 100°C making it suitable for prototypes and end-use parts subjected to high temperatures and fast tooling for plastic molding.

Printer Hardware

Build Volume (xyz)	275 x 155 x 400mm (10.8 x 6.1 x 15.7 inch)
Pixel Pitch	76.5 µm (0.0030 in)
Build Materials	UV Curable Plastics: xGPP-Blue, xGPP-Transparent, xGPP-Grey, xABS-HT-Orange, 3843-ABS-Black, xCE-Black, xMED, xCAST
Max Resolution	4K (3840 x 2160)
Wavelength	405 nm
Material Packaging	5kg jerry can

Operating Environment	
Air Temperature	20-25°C (60-80°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 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	<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	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

Performance Photoplastics

Properties	xGPP-Translucent	xGPP-Gray	xCE-White	xCE-Black	3843-ABS-Black	xMED412	xPRO410	xCast	KeyModel Ultra	KeySplint Soft	KeyGuide	KeyTray	xPP405-Black	xPP405-Clear	xPEEK147
Tensile Elongation at Break/D638	4-5.5%	4-5.5%	8%	8%	47%	141%	5.5%	8.5%	5%	110%		26%	87%	92%	3%
Tensile Modulus/ASTM D638			1620 MPa	1620 MPa	1620 MPa		2365 MPa	1620 MPa	1700 MPa			2056 MPa	1580 MPa	1620 MPa	3190 MPa
Ultimate Tensile Strength/D638	30-60 MPa	30-60 MPa	80 MPa	80 MPa	60 MPa	38 MPa	41 MPa	9.5 MPa	50 MPa		1100 MPa	62 MPa	42 MPa	39 MPa	75 MPa
Flex Modulus/ASTM D790			3250 MPa	3250 MPa	1860 MPa	1022 MPa		255 MPa	1940 MPa	1100 MPa	2400 MPa	1913 MPa	1180 MPa	1500 MPa	2170 MPa
Flex Strength/ASTM D790			135 MPa	135 MPa	81 MPa	38 MPa		13 MPa	70 MPa	44 MPa	105 MPa	85 MPa	50 MPa	69 MPa	130 MPa
Flex Modulus/ISO 20795-2										135 MPa					
Flex Strength/ISO 20795-2										2.6 MPa					
Hardness (Shore D)/ASTM D2240	84 - 88	84 - 88	90	90	86	75	79	59		80		86	80	79	94
Notched Izod/D256			20 J/m	20 J/m	54 J/m	43 J/m	25 J/m						62 J/m	62 J/m	15 J/m
HDT @0.45 MPa/ASTM D648	59 - 61°C	59 - 61°C	120°C	120°C	80°C	40°C	61°C	32°C		32°C			53°C	53°C	238°C
Water Absorption/ASTM D570	0.4%	0.4%	0.4%	0.4%	2.35%	0.36%	0.46%	1.65%					1.00%	2.00%	0.25%
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.