

# 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  $\mu$ m) 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 CRTL+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.

### Get More Info on Nexa 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-setts 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			

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# **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.



### **Printer Hardware**

GCIMQUEST **3D Printer Sales and Services** 

Offices in NJ, MA, PA, OH, & FL

			866-277-8878 cimquest-inc				
Build Volume (xyz)	275 x 155 x 400mm (10.8 x 6.1 x 15.7 inch)		Weight				
Pixel Pitch	76.5 μm (0.0030 in)	3D Printer crated	250 kg (550lb)				
Build Materials	UV Curable Plastics: xGPP-Blue, xGPP-Trans- parent, xGPP-Grey, xABS-HT-Orange, 3843-ABS-Black, xCE-Black, xMED, xCAST	3D Printer uncrated	r uncrated 160kg (350lb)				
Max Resolution	4K (3840 x 2160)						
Wavelength	405 nm	Materialise MagicsPrint for Nexa3D Software					
Material Packaging	5kg jerry can	NexaX v1 Software	Easy build processing and Remote Printer Management: submission and queues, job statisitics.				
Operating Environment		Connectivity	GigaBit Ethernet RJ-45 & WiFi Interface				
Air Temperature Electrical	20-25°C (60-80°F) NA Version : 100-120 VAC, 50/60 Hz, Single Phase, 8A (NEMA 15-5R) EU Version: 210-230 VAC, 50/60 Hz, Single	Client Hardware Recommen- dation	<ul> <li>'- 3 GHz multiple core processor with 16+ GB RAM</li> <li>NVIDEA GTX 1060 or AMD Radeon RX 480 or better graphics with 4+ GB RAM</li> <li>- 3 GB available HDD space, additional 10GB for files / cache</li> </ul>				
Humidity	Phase, 4A (CEE 7/7) RH below 70%	<b>Client Operating System</b>	Windows 10, 64bit				
numary		Input Data File Formats Supported	.stl, .3mf				
	Dimensions (WxDxH)		Ships with basic part finishing tools accessory kit.				
3D Printer crated	990 x 990 x 1905mm (39 x 39 x 75 inch)		- Max build requires wash basin & cure chamber with 300 x 180 x 480mm (12 x 7 x 19 in) capacity				
3D Printer uncrated	710 x 710 x 1675 mm (28 x 28 x 66 inch)		<ul> <li>Requires UV curing unit capable of &gt; 2mW/ cm2 and 60°C (ideal 20mW/cm2 and up to 120°C)</li> </ul>				

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
Viscosity at RT (cps)	1063	364	409	386	826	637
Color	Clear	Gray	White	Black	Black	Clear
Liquid Density	1.06	1.12	1.12	1.12	1.16	1.06
Package Size	5kg	5kg	5kg	5kg	5kg	5kg
Layer Thicknesses	100µm	50, 100µm	100, 200µm	100µm	100µm	100µm
Tensile Strength, Ultimate (MPa) ASTM D638	60	30	80	69	60	38
Elongation at Break	5.5%	4%	8%	8%	47%	141%
Flexural Strength (MPa) ASTM D790			135	135	80.6	37.6
Flexural Modulus (MPa)			3250	3250	1860	1022
Hardness (shore D) ASTM D2240	88	84	90	89	86	74.7
Impact, Notched Izod (J/m) ASTM D256			20	20	53.8	42.6
Heat Deflection Temperature @ 0.45 Mpa ASTM D648	61°C	59°C	120°C	120°C	80°C	40°C
Glass Transition (Tg)		93°C	129°C	128°C		
Water adsorption	0.4%		0.38%	0.63%	2.35%	0.36%
Description	Prototyping Material	Aestetic models	High temperature & strength	High temperature & strength	High Toughness	Medical Grade

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.