



Choosing the Right Industrial 3D Printer

Offering a full line of ultrafast 3D printing solutions that deliver unmatched speed, increase production throughput, and lower total cost of ownership.





**Ultrafast 3D Printing for
the designers, engineers,
and manufacturers of
~~tomorrow~~ today.**

Time is against you. Whether you are designing a new pair of headphones, engineering a high-performance electric motor, or manufacturing batches of toggle switches - today's world demands speed. That's why we're pushing the limits of 3D printing and providing the fastest desktop and industrial 3D printers on the market.

[Take your time back.](#)

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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 × 120 × 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	<ul style="list-style-type: none">• Lubricant Sublayer Photo-curing (LSPc); Everlast-2 membrane
Build Volume	<ul style="list-style-type: none">• X: 195 mm (7.5"), Y: 115 mm (4.7"), Z: 210 mm (8.6")• 4.8 liters print volume
Light Engine	<ul style="list-style-type: none">• 405 nm LED array w/ collimating lens• Modular 9.3" Monochrome 4K LCD Mask
Resolution	<ul style="list-style-type: none">• 0.050 mm (.002") / 0.100 mm (.004") / 0.200 mm (.008")• Pixel Size: 52µm
Resin System	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Billet aluminum enclosure• 420mm (16.5") W × 350mm (14") D × 530mm (21") H• 5.5" Color HD OLED Touchscreen Display• Z-Stage<ul style="list-style-type: none">• Rigid parallel linear rails• Recirculating ballscrew• Ethernet / USB / Wi-Fi connectivity
Software	<ul style="list-style-type: none">• NexaX Basic or NexaX Pro for XiP• Supported File types: .stl, .obj, .3mf• Operating Systems: Windows 10/11
Operating Environment	<ul style="list-style-type: none">• 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.



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



Essential Accessories



Wash + Cure

The XiP Wash + Cure is a 2-in-1 post processing station that provides optimal automated post-processing in a compact package. Simply drop parts into the wash bin with IPA or xCLEAN and run the wash cycle. Then remove the wash bin and place your part on the turntable, fold down the LED arm, and place the reflective cover over the top for post-curing.



XiP Air

The XiP Air is a bluetooth-enabled desktop air filter and purifier. It comes with a HEPA filter specifically designed for Nexa3D with 5X the normal activated carbon to remove nuisance smells from the printing environment.

xCURE

DESKTOP



xCURE Desktop is an ultrafast, high-powered UV curing system that supports three different wavelengths (365nm, 385nm, and 405nm), making it a versatile solution for all resin printers.

Housed in a rugged, anodized metal enclosure for superior durability, xCURE Desktop reduces cure times by up to 80% with cure times as low as 6 minutes. This allows users to post-process parts much faster, and Nexa3D's predefined curing workflows guarantee consistent mechanical properties and predictable part performance.

Technical Specifications

External Dimensions (W×D×H)	14.2 × 11.8 × 9.8 in. / 36 × 30 × 25 cm
Curing Dimensions (D×H)	7.08 × 4.72 in / 180 × 120 mm
Light Engine	365nm / 385nm / 405nm
Cure Time	6–20 minutes
Resin System	Presets and customizable settings
Rated Voltage	220/110V

XiP Pro

Productivity Redefined



Key Features

High throughput 3D printing powered by next-generation LSPc technology

- With a 19.5 L build volume, and a print speed up to 24 vertical centimeters per hour, XiP Pro can fill out its entire build volume with prints in under two hours
- Cutting edge 7K resolution with 46 μm XY resolution
- Pristine, isotropic parts with exceptional detail, accuracy & surface finish
- Disruptive, modular and scalable Light Engine technology
- Advanced sensor suite including environmental monitoring to help ensure print to print consistency on the production floor
- Closed-loop z-stage with smart-homing, including collision avoidance and debris detection
- Spacious build platform (292 × 163 × 410 mm)



A complete 3D printing solution superior in speed and workflow for high-throughput production needs.

Unparalleled productivity.

XiP Pro's class-leading throughput is well ... stunning. Just one XiP Pro can do the work of four of its closest competitors in the high-speed resin 3D printing category.

Industrial capacity without the footprint.

A solid billet aluminum unibody frame provides strength, durability, and z-stage stability for maximum precision and reliability, all efficiently packaged to fit in any setting.

Post-processing, automated.

High throughput post-processing is often a missing element from other industrial solutions. Even if it is included, the units are small and slow. xWASH and xCURE provide a powerful one two post-processing punch for hassle free washing and post-curing of your large XiP Pro builds. With an average combined time of about 40 minutes, just hit start, to finish.

Scalable Technology

For designers, engineers, and manufacturers who need fast, accurate, and scalable manufacturing solutions, the XiP Pro is an industrial 3D printer that delivers ultrafast speeds and industry-leading production capabilities. With the XiP Pro you gain the ability to design, iterate, and take a product to market faster – and all with the same manufacturing technology.

Production made simple.

From smart resin cartridges, to a suite of on-board sensors that automatically optimize each print, to auto-homing, XiP Pro makes every print job a breeze.

Five-Star service

Evercare is Nexa3D's premium level service plan that gives you added peace of mind with your investment. With experts on-call and, even, dispatched to your factory floor, it's like you hired your own team of 3D printing technicians.

XiP Pro Printer Hardware

Build Volume (xyz)	292 × 163 × 410 mm (11.4 × 6.4 × 16.1 in.)
Max Resolution	7K resolution
Pixel Size	46 µm
Wavelength	405 nm
Material Packaging	1.5 Kg canister and 5 Kg jerry can

Operating Environment

Air Temperature	20-25°C (60-80°F)
Humidity	RH below 70%
Electrical	100-240 V; 50/60 Hz; 950W

Dimensions (WxDxH)

3D Printer crated	813 × 661 × 1524 mm (32 × 26 × 60 in.)
3D Printer uncrated	622 × 447 × 895 mm (24.5 × 17.6 × 35.25 in.)

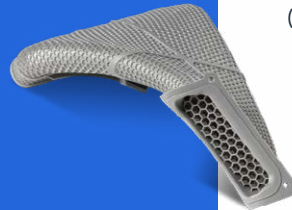
Weight	
3D Printer crated	114kg (250 lbs)
3D Printer uncrated	77kg (170lb)

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	<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 or 11, 64bit
Input Data File Formats Supported	.stl, .obj, .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 × 180 × 480mm (12 × 7 × 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

nxp400Pro

Industrial 3D Printer for Ultrafast
Production Parts and Prototypes



Key Features

Precision high speed additive manufacturing

For labs, workshops, and
production facilities,
NXE 400Pro offers a large
build volume, great accuracy,
and fast printing thanks to its
proprietary LSPc® tech.

Versatile build volume

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

Robust, high-performance materials portfolio

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

Edge-to-edge uniformity and accuracy with 7K resolution

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

NXE400Pro

Accessibility

For designers, engineers, and manufacturers who need fast, accurate, and scalable prototyping and manufacturing solutions, the NXE 400Pro is an industrial 3D printer that delivers incredible speed and excellent production capabilities. With the NXE 400Pro 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 (17L) compared to SLA and DLP-based technologies, the NXE 400Pro photopolymer 3D printer allows for much larger parts, higher part throughput, and ultimately lower part cost — all with higher resolution pixels (46 µm) and isotropic prints.

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.

NXE 400Pro Printer Hardware

Build Volume (xyz)	275 × 155 × 400 mm (10.8 × 6.1 × 15.7 inch)
Pixel Pitch	46 μm (0.0018 in)
Max Resolution	7K (6480 × 3600)
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 (W×D×H)	
3D Printer crated	990 × 990 × 1905 mm (39 × 39 × 75 inch)
3D Printer uncrated	710 × 710 × 1675 mm (28 × 28 × 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 Operating System	Windows 10 & 11, 64bit
Input Data File Formats Supported	.stl, .obj, .3mf

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

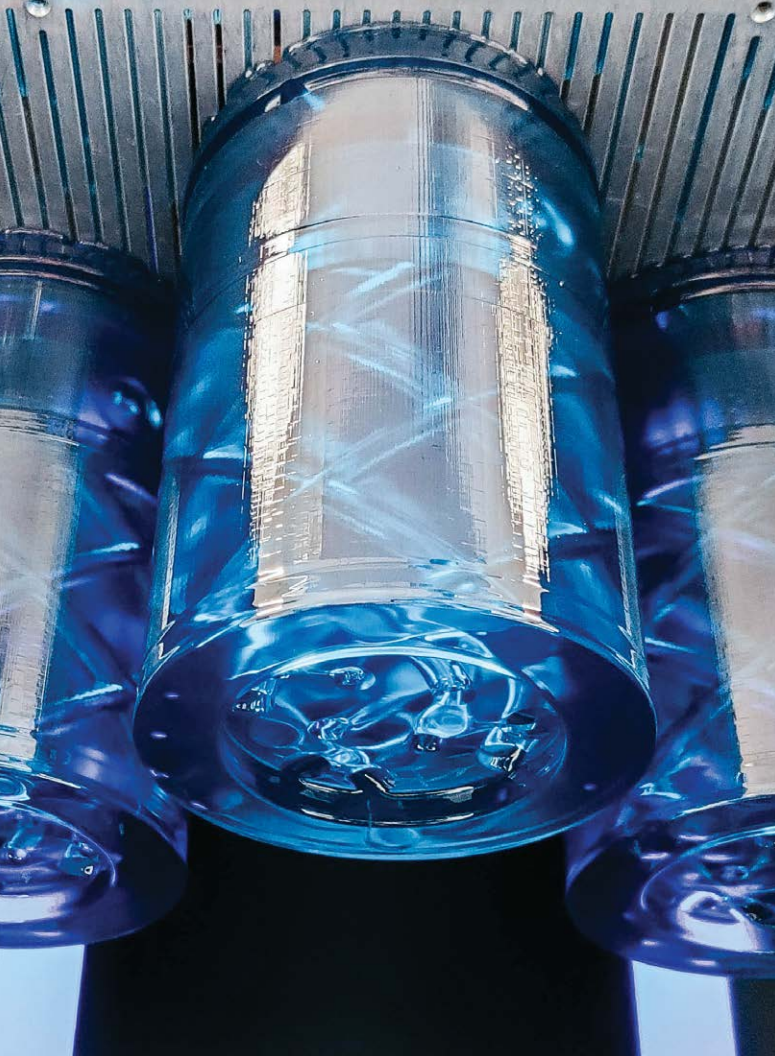
High Performance Engineering Materials

Nexa3D's robust materials portfolio is backed by strong partnerships with leading material providers including Henkel and BASF. Our engineering resin 3D printing materials are tailored to the LSPc process to deliver ultrafast speed, strength, durability, and accuracy. With a growing catalog of verified resins and unlimited options with our open platform there is a material for every application.

 <p>xMODEL15-Gray</p>	<h3>High Speed Prototyping</h3> <p>Speed and throughput along with fine detail are on display with Nexa3D's prototyping category of resins.</p>
 <p>xABS3843</p>	<h3>Engineering/Production</h3> <p>When the job calls for strong, durable production parts that will last, these resins are up to the task.</p>
 <p>xFLEX475-White</p>	<h3>Soft and Flexible</h3> <p>Soft, silicone-like parts that can bend, flex, compress, and stress over multiple cycles without tearing.</p>
 <p>xPEEK147</p>	<h3>High Temp</h3> <p>High heat applications such as tooling require heat resistant parts - xPEEK can withstand temperatures up to 238°C over hundreds of cycles.</p>

Category	Material	Tensile Modulus (ASTM D638)	Ultimate Tensile Strength (ASTM D638)	Tensile Elongation at Break (ASTM D638)	Flex Modulus (ASTM D790)	Flex Modulus (ASTM D790)	Notched Izod (ASTM D256)	HDT@0.45MPa (ASTM D648)	Water Absorption (ASTM D570)	Hardness (ASTM D2240)	Energy Return	Tear Strength (ASTM D624)	Surface Resistance (ASTM D257)
		MPa	MPa	%	MPa	MPa	J/m	°C	%	Shore	%	kN/m	Ω
High Temp	xPEEK147	3190	75	3	3170	130	15	238	0.2	D94			
Engineering	xCERAMIC	9410	40	0.5				280	0.29	96			
Engineering	xPRO9400-FR	3470	71	3.1	3400	115	20	>174	0.65	88			
Engineering	xPRO1100-Black	2950	70	5	2790	125	21	100	0.14	84			
Engineering	xESD	2600	68	4	1800	97	24	91		D87			1.00E+07
Prototyping	xMODEL35	2600	62	10	2300	108	21	87	0.4	D83			
Prototyping	x45-Natural	1600	52	12	2100	95	20		6.0	D85			
Engineering	xABS3843	1400	32	50	1400	30	54	56	2.3	D86			
Engineering	xPP405-Black	1300	35	100	1300	45	62	53	1.0	D80			
Soft and Flexible	xFLEX475-White	5	4	159						A55	39	11.7	
Soft and Flexible	xFLEX475-Black	4	3	150						A44	47	7.3	
Prototyping	xMODEL15 Black	48	28		49	36							
Prototyping	xMODEL15 Gray	48	28		49	36							
Prototyping	xMODEL15 White	48	28		49	36							
Prototyping	xMODEL17 Clear	1213	30	22	1467	57	47	47	0.24				

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.



FIM

Freeform Injection Molding: Combine the design freedom of 3D printing with 1000s of injection molding materials

Ultrafast Tooling

powered by xMOLD resin

The patented Freeform Injection Molding (FIM) process uses xMOLD resin to print injection molding tools that are compatible with thousands of off-the-shelf injection molding materials, including reinforced high-performance feedstocks. The ability to design, iterate, and validate using final grade production materials is invaluable in any product development process.

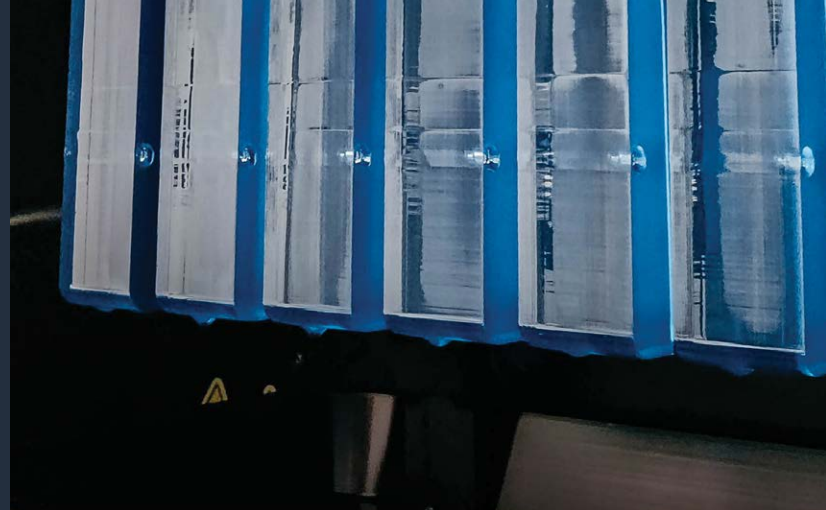
Dissolvable Tooling

powered by xMOLD resin

The FIM process is unique in offering fully soluble tooling, enabling new design freedom and eliminating the need for time consuming design and gating considerations typically associated with conventional tooling. You can quickly design and print tools for highly complex parts, inject with injection molding feedstock, and then dissolve away the tool to reveal the complex shape underneath.

CAD to Tool in Hours

Combining the speed and throughput of Nexa3D's LSPc printers with the flexibility of xMOLD resin, you can go from design to complex tool in a matter of hours. Accelerate your design cycles, slash your R&D costs, and get to market faster with digital tooling from Nexa3D.



Desktop Solution

XiP Desktop 3D Printer + Demolding Station

The complete package for low-volume tool production on your desktop.

Desktop Package:

- XiP Printer
- XiP Wash + Cure station
- xWASH-FIM (46L) Demolding Station
- xMOLD Resin 5 kg
- Freeform mold generator software, 1-year



Industrial Solution

XiP Pro Industrial 3D Printer + Demolding Station

Industrial package for scaled production of reusable and dissolvable tooling.

Industrial Package:

- XiP Pro Printer
- xWASH
- xCURE
- xWASH-FIM (102L) Demolding Station
- xMOLD Resin 10kg
- Freeform mold generator software, 1-year



xWASH

Nexa3D's xWASH matches the build volumes and process requirements of ultrafast XiP Pro and NXE 400Pro 3D printers, 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 up to 2 XiP Pro/ NXE Pro Series 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 860 mm
Weight	60kg (wet)
Reservoir Capacity	35L
Maximum part capacity	275 x 155 x 400 mm
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

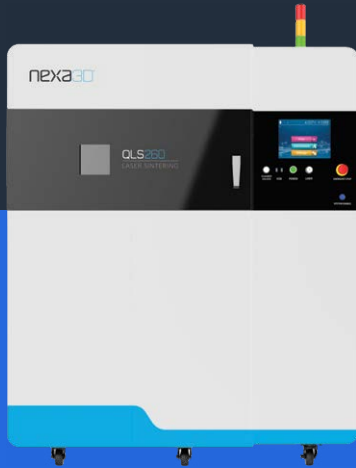
Operation options: light only, heat only, or light and heat combination

Specifications

Single click – rotate and push operation	External Dimensions (WDH) 21 × 20 × 32 in. / 53.34 × 50.80 × 81.28cm
Validated resin pre-sets for consistent part curing results	Internal Dimensions (WDH) 15.50 × 10.75 × 25.75 in. 39.37 × 27.30 × 65.40cm
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

QLS260

Fast Cycle SLS 3D Printing



Key Features

Increase Daily Output

With a cycle time of just 22-24 hours where the required cooling period is only 2 hours, the QLS 260 is a productivity powerhouse. Increase your daily throughput without the need for a lengthy cooling period due to optimal build chamber size.

Lowest Total Cost of Ownership

With the lowest entry point in the professional selective laser sintering market, combined with lower operating costs due to its powder refresh rate of just 20% and use of third party materials, the QLS 260 offers the lowest total cost of ownership for your industrial SLS 3D printing needs.

Material Flexibility

The QLS 260 is open platform with 10+ qualified nylon and metal fusion materials. In addition to the currently qualified materials, it excels with recycled powders from HP, EOS, and others to deliver zero-waste production and ultimate operational sustainability.

Achieve ultimate versatility with your QLS printer to manufacture both polymer and metal parts. This platform is validated to print Headmade Materials® metal feedstock, including Titanium, SS 316L, SS 17-4, and M2 Tool Steel.

QLS260

Delivering fast, accurate, and scalable prototyping and production solutions.

Open Material Platform

In addition to accepting recycled powder from HP and EOS, the QLS 260 currently has over 10 qualified polymer and metal powders, including a range of Polyamides and TPUs, as well as metals like Titanium, Stainless Steel, and Tool Steel.

ColdMetalFusion Compatible

Cold Metal Fusion by headmade materials® is a patented process that combines the advantages of fast cycle sintering with established powder metallurgy processes to create metal parts. Using a polymer-coated metal powder, the QLS 260 produces 'green' parts in a low temperature processing environment. Parts then go through a secondary debinding and sintering process that burns out any remaining polymer and sinters metal particles together to form final metal components.

Intuitive Software

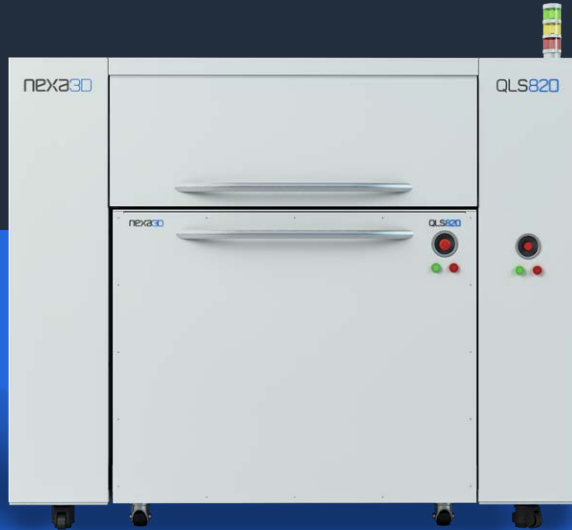
The QLS 260 is powered by NexaX for QLS, a powerful yet easy-to-use platform used to set up builds and control the sintering process.

Technical Data

QLS 260 Specifications	
Technology	SLS (Selective Laser Sintering)
Build Volume	230 × 230 × 250 mm (9.0 × 9.0 × 9.8 inch)
Laser Performance	60W CO2
Layer Thickness	0.06 / 0.08 / 0.1 / 0.15 / 0.2 / 0.3 mm
Max. Build Speed	Up to 22 mm / hour (Geometry dependent)
N2 System	On-Board Nitrogen Generator
Software	NexaX for QLS
Product Dimensions (WxDxH)	1,480 × 850 × 2,040 mm (58.0 × 33.0 × 80.0 inch)

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

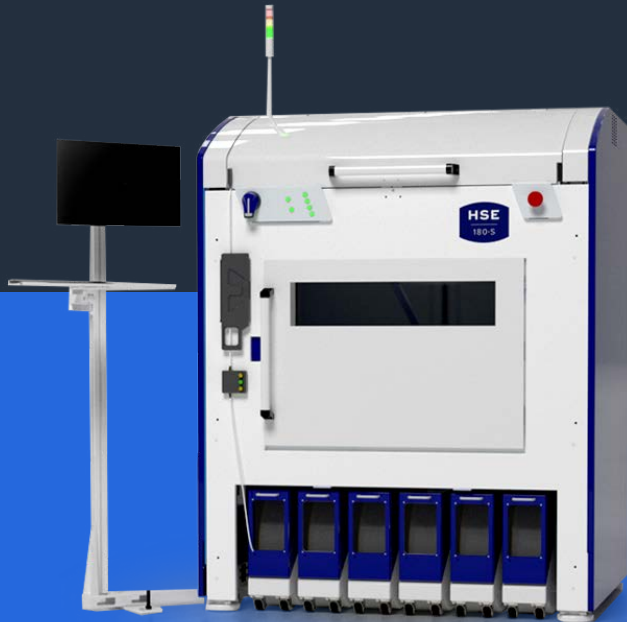
The QLS 820 features a modular material processing station (MMPS). From powder containment and blending to breakout, powder reclamation and sieving, the MMPS offers a scalable solution that ensures safe, clean, and efficient material handling across all material operations.

Technical Data

Dimensions (Closed)	200 × 140 × 200 cm
Weight	750kg
Power Requirements	26 kWatt
Operating Temperature	+5°C/+25°C
Interface	Web Dashboard
Laser Type	4 × 100W CO ₂
Material Delivery System	Removable Build Unit
Additional Equipment	Power handling and refreshing station
Z. Resolution	50-200 microns
Build Volume	350 × 350 × 400 mm
Printing Speed	Up to 8 liters per hour up to 20% average job density

HSE180

High Speed Extrusion 3D Printer



Key Features

Unmatched Speed

Achieve printing speeds of up to 500 mm/sec utilizing linear servo motors, boasting impressive 1G acceleration, and a swift 1 m/sec travel speed.

Large Build Volume

Efficiently produce substantial components with rapid speed and robustness on a generously sized build plate that accommodates 85% of the world's jigs and fixtures.

Open Ecosystem

Select the ideal material for your application from our extensive material portfolio or explore alternatives to ensure optimal performance with your filament choice.

HSE180

The First Generation of High Speed Extrusion

Innovating the Additive Manufacturing Landscape

Traditionally, extrusion 3D printing methods such as FFF and FDM have been characterized by painstakingly slow processes, requiring hours for simple geometries and days for intricate designs. Our HSE technology revolutionizes this by minimizing wasted movement through linear servo motors, boasting 1G acceleration, and a rapid 1 m/sec movement speed. This breakthrough enables manufacturers to achieve printing speeds five to 15 times faster than conventional FFF and FDM printers.

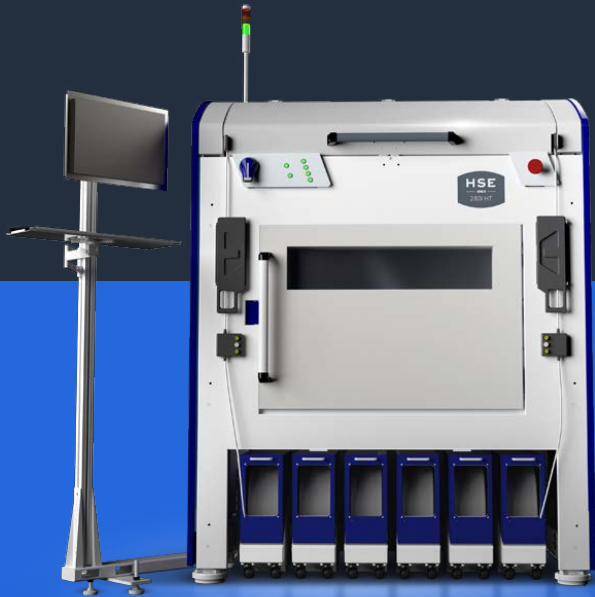
The synergy of our HSE technology and its extensive range of top-quality materials empowers manufacturers to scale 3D printing to match the efficiency of subtractive manufacturing, laying the foundation for the advancements of Industry 4.0.

Technical Data

HSE 180 Specifications	
Print Heads	One
Filament Diameter	1.75 mm
Nozzle Diameters	0.4, 0.8 mm
Build Volume	690 × 500 × 600 mm
Electrical Requirements	4 KVA, 220/240V 20A for LT machine and 40A for ST and HT machines, Single Phase 50/60 Hz
Net Weight	850 kg
Printer Dimensions	1590 × 1350 × 2490 mm

HSE280i

High Speed Extrusion 3D Printer



Key Features

Fully Independent

The HSE 280i HT 3D Printer stands as the inaugural 3D printer in the industry to boast true independent dual extruders (IDEX), signifying complete autonomy for each head along both the X and Y-axes.

Speed and Reliability

Harnessing a non-slip, high-torque extrusion system powered by all-linear servo motors, the HSE 280i HT 3D Printer delivers an uncompromising solution. This innovative design ensures both speed and reliability, enabling seamless 3D printing at scale.

Open Ecosystem

In a recent third-party study commissioned, it was revealed that 96% of manufacturers are advocating for open ecosystems to enhance their control. Empowering users with limitless material options, the HSE 280i HT 3D Printer aligns with this demand for greater control.

HSE280i

The First Generation of High Speed Extrusion

Revolutionize your manufacturing process with the HSE 280i High Speed Extrusion (HSE) 3D Printing Platform, outpacing the competition at speeds ranging from five to 15 times faster. Designed to overhaul factory floor operations, this cutting-edge printer utilizes an X-Y stage equipped with linear servo motors. By addressing longstanding challenges in strength, speed, and scalability, the HSE 280i redefines the possibilities of additive manufacturing.

What is True IDEX?

Pioneering innovation, the HSE 280i 3D Printing Platform stands out as the initial industrial 3D printer to provide authentic Independent Dual Extruders (IDEX). Distinguishing itself from other IDEX machines in the market, which position print heads on the same X-axis gantry, the HSE 280i ensures true independence by allowing unrestricted movement on both the X and Y axes. This sets it apart from “semi-IDEX” machines, which are constrained to synchronous Y-axis print modes.

Four Print Modes

With four distinct print modes, the HSE 280i 3D Printer provides a versatile printing experience. The genuine independence of the print heads along both the X and Y-axes offers users the flexibility to efficiently produce parts at scale.

Technical Data

HSE 280i Specifications	
Print Heads	Two
Print Speed	500 mm/s
Filament Diameter	1.75 mm
Nozzle Diameters	0.4, 0.8 mm
Nozzle Temperature	Up to 550°C
Build Volume (Single Head Mode)	695 × 500 × 600 mm
Build Volume (Support Mode)	595 × 500 × 600 mm
Build Volume (Multi-Process Mode)	595 × 500 × 600 mm
Build Volume (Independent Mode)	Future Feature
Electrical Requirements	200–240 VAC, 40A, single/dual phase
Net Weight	850 kg
Printer Dimensions	1590 × 1350 × 2490 mm

DRYBOX

Humidity-Controlled Filament Storage



Key Features

Humidity-Controlled Environment

DryBox boasts a humidity recovery time of under five minutes and can consistently maintain relative humidity values below 1% (with a dew point under -40°C).

Self-Regulating Drying

Enabling manufacturers to access crucial moisture-sensitive components from dry storage as frequently as 10 to 12 times per hour, surpassing the access frequency of competitive dry cabinets by more than twice.

Smart Filament Storage Solution

Features a digital touchscreen interface for configuring dry storage settings, intelligent LED interior status lighting, onboard data logging, and network connectivity.

Experience Seamless Operation with the Full Color HD Touch Screen Display and Easy-To-Use Features

Experience unprecedented control with the 4.3" TFT LCD display, streamlining DryBox™ operation. This full-color touch screen ensures quick access to key functions, including Light and Mute Alarm, DryBox™ and SmartBAKE™ modes, and a comprehensive RH and Temperature Histogram graph. The user-friendly interface simplifies navigation, while advanced features like flexible bake cycle programming and a compact footprint maximize efficiency, making DryBox™ the ultimate solution for floor life restoration.

DRYBOX

Enhanced Control and Efficiency

Two DryBox Models: DB90 and DB270

DryBox DB90

DB90-SB includes SmartBAKE™ which incorporates a powerful heater and insulation for baking out filament. It has storage capacity of 283 liters (10 cu ft – 2 doors, floor shelf & 2 Reel Racks) in a 45”H x 20”W x 30”D footprint and offers built-in network capability and a user friendly TFT LCD control display.

Doors: 2

Door Opening: 18.0” W x 17.5” H

Accommodates:

- 24 spools (750 g)
- 8 spools (2.5 kg)
- 6 spools (15 kg)

Includes:

- DryBox™ Cabinet
- SmartBAKE™ (40-60°C Bake Heater)
- Floor Shelf
- 2 Reel Racks
- User's Guide
- Quick Reference Guide
- Warranty (2 Years)



Technical Data

DB90 Specifications	
External Dimensions (H x W x D)	1143 mm x 508 mm x 762 mm (45" x 20" x 30")
Internal Dimensions (H x W x D)	985 mm x 479 mm x 540 mm (38.8" x 18.8" x 21.2")
Internal Capacity	283 liters (10 cu ft)
Number of Shelves/Racks	1 Floor Shelf & 2 Reel Racks
Maximum Shelf Capacity	22 kg (50 lbs)
Maximum Cabinet Capacity	68 kg (150 lbs)
Recovery Time	< 3 minutes
Power Consumption (Average)	10W Standby, 450 Max., 15W/Hr Ave. (1050W Peak w/ SmartBAKE Option)
Display Resolution (RH/Temp)	0.1% / 0.1 °C (0.1 °F)
Accuracy (RH/Temp)	± 1.8% / ±1 °C (1.8 °F)
Casters	76.2 mm (3") Diameter
Cabinet Weight	< 70 kg (154 lbs)

DRYBOX

Enhanced Control and Efficiency

DryBox DB270

The DB270 has storage capacity of 850 liters (30 cu ft) with 2 tall doors facilitate easy accessibility for filament racks in a 70"H x 40"W x 30"D footprint and offers built-in network capability and a user friendly TFT LCD control display.

Doors: 2

Door Opening: 18.0" W x 57.25" H

Accommodates:

- 72 spools (750 g)
- 24 spools (2.5 kg)
- 18 spools (15 kg)

Includes:

- DryBox™ Cabinet
- 2 Floor Shelves
- 6 Reel Racks
- User's Guide
- Quick Reference Guide
- Warranty (2 Years)



Technical Data

DB270 Specifications

External Dimensions (H x W x D)	1778 mm x 1016 mm x 762 mm (70" x 40" x 30")
Internal Dimensions (H x W x D)	1500 mm x 990 mm x 540 mm (59" x 38.9" x 21.2")
Internal Capacity	850 liters (30 cu ft)
Number of Shelves/Racks	2 Floor Shelf & 6 Reel Racks
Maximum Shelf Capacity	22 kg (50 lbs)
Maximum Cabinet Capacity	113 kg (250 lbs)
Recovery Time	< 4 minutes
Power Consumption (Average)	25W Standby, 850 Max., 30 W/Hr Average
Display Resolution (RH/Temp)	0.1% / 0.1 °C (0.1 °F)
Accuracy (RH/Temp)	± 1.8% / ±1 °C (1.8 °F)
Casters	76.2 mm (3") Diameter
Cabinet Weight	< 163 kg (360 lbs)

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