Nexa3D Solutions vs. Origin One Comparison

The XiP Pro and NXE 400Pro solutions from Nexa3D and Stratasys Origin One are three of the most popular high-speed, industrial 3D printers available. Here is a simple comparison between the systems to help you determine which one is better for your particular application.

Nexa3D® XiP Pro

XiP Pro offers the highest daily throughput in its class at the lowest operational costs making it ideal for industrial users looking to scale additive production

Nexa3D® NXE 400Pro

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

Stratasys® Origin One

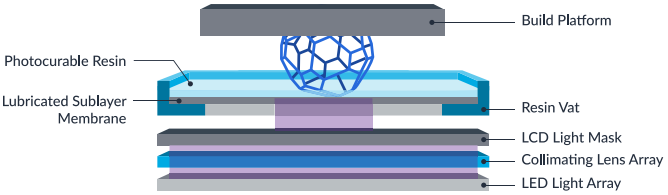
Origin One is one of several Stratasys resin-based 3D printers. Origin One offers high-speed 3D printing utilizing its P3™ tech for manufacturing and prototyping applications.

Compare Specs

	Nexa3D XiP Pro	Nexa3D NXE 400Pro	Stratasys Origin One
Technology	LSPc	LSPc	P3
Light Engine	LED/LCD (7K, 405nm) 46 µm with 23 µm sub-pixel resolution	LED/LCD (4K, 405nm) 76.5 µm	DLP (4K, 385nm) 50 µm
Throughput	★★★★★	★★★★	★★
Build Volume	292 x 163 x 410 mm (19.5 L)	275 x 155 x 400 mm (17 L)	192 x 108 x 370 mm (7.5 L)
Vat Capacity	3L	3L	2L
Materials	Open with 25+ validated resins	Open with 25+ validated resins	Open with 25+ validated resins
Resin Dispensing	Smart resin-feed system	Semi-automatic resin dispensing	manual pour-in
Wash Solution	xWASH and xCLEAN – washes two full builds at once	xWASH and xCLEAN – washes two full builds at once	Requires 3rd party solution such as Branson 8800 ultrasonic bath, IPA, and Tupperware
Post-Cure Solution	xCURE cures up to three builds at once	xCURE cures up to three builds at once	Requires 3rd party solution such as Dymax ECE5000 Box
Price	$59,995 (40% less than Origin One)	$41,995 (58% less than Origin One)	$99,000

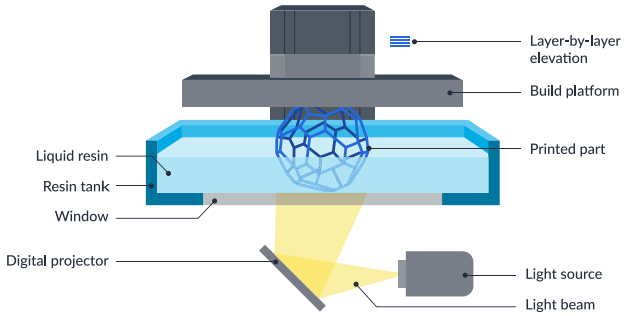
3D Printing Technologies

Nexa3D LSPc Technology



Lubricant Sublayer Photo-curing utilizes a proprietary membrane that reduces peel forces enabling high-speed 3D printing for parts small and large, solid and latticed. An industrial LED light engine further enables high resolution and high precision 3D printing.

Origin P3



DLP Process

Programmable PhotoPolymerization (P3) is a version of DLP with a variety of sensors to control variables throughout the print and an inflating membrane that acts to remove the print from the vat bottom.

Throughput Comparison

Nexa3D's XiP Pro and NXE 400Pro printers are able to manufacture parts with a significantly higher throughput than the Stratasys Origin One, translating to more parts in the same amount of time and lower cost per part for manufacturers. Here's how these printers compare:

Beveled Cylinder

Part Dimensions
24.4 x 24.4 x 100 mm

Part Volume
25 cm^3

Material
ST45

	Print Time (Full Build)	Parts Per Build	Print Time Per Part	Parts Per Day
XiP Pro*	1 Hour 36 Minutes	66	1.5 Minutes	758
Origin One†	2 Hours 53 Minutes	28	6 Minutes	178

** These calculations used ST45 material at 200 micron layer height.*
† Data gathered 04/23 as reported by the Stratasys® manufacturing ROI calculator for Textured Cylinder in ST45

Post-Processing Systems

NXE Pro Series

xWash / xCure

Nexa3D offers two purpose-built post-processing accessories. The xWASH holds up to two full builds in its 35 L volume and completely washes residual resin in a 2-4 minutes. The xCURE can hold three full builds and has the ability to cure and heat parts with preset profiles built in.

Origin One

3rd-Party Only

Origin One does not offer a purpose built post-processing solution, but they do recommend a list of third-party options. The wash baths tend to use ultrasonic waves. The Branson 8800 is a standard example with a bath volume of about 20 L – meaning parts may need to be washed in batches.