

Velo3D Ships First Sapphire® XC to an Aerospace Customer, Delivering Bigger Parts, Productivity Improvements, and Cost Reduction for Metal Additive Manufacturing

The Production Scale Up Version of Velo3D's Successful End-to-end Solution Was Shipped to a Key Aerospace Customer to Improve Its Additive Manufacturing Capabilities

CAMPBELL, Calif.--(BUSINESS WIRE)-- [Velo3D](#), Inc. ([NYSE: VLD](#)), a leading metal additive manufacturing technology company for mission-critical metal parts, has announced its first Sapphire® XC delivery. The Sapphire® XC, or “Extra Capacity,” is Velo3D’s newest and largest metal 3D printer that delivers both faster production and larger parts. The Sapphire® XC is a scale up version of the Sapphire® printer, utilizing the same Flow™ print preparation software, the same Assure™ quality control software, and the same Intelligent Fusion® manufacturing process.

Sapphire® XC is built to enable a seamless transition of parts that were developed and qualified on Sapphire® to the larger, more productive Sapphire® XC, reducing the cost of producing parts by up to 75%. Sapphire® XC also expands the use of Velo3D’s production solution to parts that are up to 400% larger in volume than the largest parts possible to produce with Sapphire®. The customer receiving the new Sapphire® XC will use it to scale up production of its product that is built using the Sapphire® fleet of metal 3D printers they already have.

“I believe that the Sapphire XC will quickly become the gold standard in advanced metal additive manufacturing,” said Benny Buller, Velo3D CEO and Founder. “Because our customer is already utilizing our end-to-end production solution, they can immediately and seamlessly move parts to Sapphire XC to achieve a phenomenal production rate increase. We made a huge effort to ensure that Sapphire XC uses the exact same manufacturing process as Sapphire. The ability to move production seamlessly between different products was considered impossible when we started Velo3D, but I am proud to declare that we have unlocked this ability for our customers and partners. It is a huge accomplishment—our biggest achievement of 2021.”

Velo3D currently has a backlog of firm bookings for 17 additional Sapphire® XC systems as well as 19 additional reservations. The demand is primarily driven by the lower production costs Sapphire® XC can enable for customers who have adopted the original Sapphire® printers and its ability to produce much larger parts. These improvements are largely driven by new features and capabilities the printer delivers, including:

- **Larger build volume:** The Sapphire[®] XC is one of the largest available laser powder bed fusion (LPBF) printers with a build volume of 600 mm in diameter and 550 mm in height—400% larger volume than the original Sapphire[®] system.
- **Additional lasers:** The Sapphire[®] XC uses eight 1-kilowatt lasers to selectively weld powdered metal layer-by-layer. Velo3D's Sapphire[®] system uses two 1-kilowatt lasers.
- **Faster non-contact recoater:** Compared to its Sapphire[®] system, Velo3D's proprietary protrusion-tolerant recoater is now twice as fast on Sapphire[®] XC, significantly reducing non-productive overhead time.

All of these features come together to dramatically increase throughput by up to 400%, which lowers the cost of produced parts by up to 75%.

The ability for existing customers to seamlessly transition from the Sapphire[®] to the Sapphire[®] XC is a key differentiator for Velo3D. This is made possible by Velo3D's end-to-end solution that preserves design intent and delivers predictable, repeatable outcomes.

The Flow[™] pre-print preparation software analyzes part designs and prescribes a set of known recipes needed to manufacture the part. Customers simply upload the CAD file for a part they would like to print and the software's integrated simulation engine creates a file that can be used across any device to build exactly the same part. As parts are printed, the Assure[™] quality assurance and control system monitors the build and provides detailed reporting for full traceability layer by layer. This gives customers confidence that the parts produced are identical across Sapphire[®] printers.

The Sapphire[®] XC is able to print using a wide variety of materials that are often used in the production of mission-critical parts in the aviation, aerospace, defense, oil and gas, and energy industries. The list of available metals includes Inconel 718 & 625, Hastelloy[®] X, Hastelloy[®] C22, Aluminum, Scalmalloy[®], and Titanium Ti-6Al-4V. Velo3D continually evaluates and qualifies new materials for use in its end-to-end solution.

About Velo3D:

Velo3D is a metal 3D printing technology company. 3D printing—also known as additive manufacturing (AM)—has a unique ability to improve the way high-value metal parts are built. However, legacy metal AM has been greatly limited in its capabilities since its invention almost 30 years ago. This has prevented the technology from being used to create the most valuable and impactful parts, restricting its use to specific niches where the limitations were acceptable.

Velo3D has overcome these limitations so engineers can design and print the parts they want. The company's solution unlocks a wide breadth of design freedom and enables customers in space exploration, aviation, power generation, energy and semiconductor to innovate the future in their respective industries. Using Velo3D, these customers can now build mission-critical metal parts that were previously impossible to manufacture. The end-to-end solution includes the Flow[™] print preparation software, the Sapphire[®] family of printers, and the Assure[™] quality control system—all of which are powered by Velo3D's Intelligent Fusion[®] manufacturing process. The company delivered its first Sapphire[®] system in 2018 and has been a strategic partner to innovators such as SpaceX, Honeywell, Honda,

Chromalloy, and Lam Research. Velo3D has been named to Fast Company's prestigious annual list of [the World's Most Innovative Companies for 2021](#). For more information, please visit velo3d.com, or follow the company on [LinkedIn](#) or [Twitter](#).

Forward-Looking Statements

This press release includes "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1996. The Company's actual results may differ from its expectations, estimates and projections and consequently, you should not rely on these forward-looking statements as predictions of future events. Words such as "expect", "estimate", "project", "budget", "forecast", "anticipate", "intend", "plan", "may", "will", "could", "should", "believes", "predicts", "potential", "continue", and similar expressions are intended to identify such forward-looking statements. These forward-looking statements include, without limitation, statements regarding the production capacity, cost reduction and other expected benefits of Sapphire[®] XC, expected demand for Sapphire[®] XC and existing customers' ability to transition to Sapphire[®] XC and the Company's other expectations, hopes, beliefs, intentions or strategies for the future. These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from the expected results. You should carefully consider the risks and uncertainties described in the documents filed by the Company from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Most of these factors are outside the Company's control and are difficult to predict. The Company cautions not to place undue reliance upon any forward-looking statements, including projections, which speak only as of the date made. The Company does not undertake or accept any obligation to release publicly any updates or revisions to any forward-looking statements to reflect any change in its expectations or any change in events, conditions or circumstances on which any such statement is based.

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