August 13, 2021

Vertex is the First Contract Manufacturer to Offer Hastelloy®-X Superalloy 3D-Printed on a Velo3D Metal Additive Manufacturing Solution

AS9100-certified shop to produce high-value AM parts for aerospace, oil & gas, energy

CINCINATTI, Ohio – August 13, 2021 – Vertex Manufacturing, a Cincinnati-based contract manufacturer, has purchased a second end-to-end additive manufacturing solution from Velo3D Inc.—this time dedicated to the superalloy Hastelloy®-X. Vertex is the first contract manufacturer to own a Velo3D system that processes this high-performance material. The company acquired a Velo3D solution for Inconel 718 alloy, in June.

Vertex was created by industry pioneers, originally of Morris Technologies, with a mission to help customers needing advanced manufacturing solutions for both development and production programs. Staffed by experts with decades of experience in materials, methods and quality, Vertex offers a range of services in addition to additive manufacturing (AM), including advanced multi-axis CNC machining, rapid castings and final inspection of manufactured parts.

The decision to purchase a Sapphire® Hastelloy®-X of their own was definitely a forward-looking one for Vertex, says the company's vice president, Tim Warden. "We chose Velo3D because we view this system as being a great fit for a number of applications that we couldn't build today with our current additive machines. While our Inconel 718 Sapphire® machine will fit the needs of many industries, there's more of a niche market for the incoming Hast-X machine that will allow our customers with specialized needs for high-temperature, high-pressure, long-lifetime applications in the aerospace, and industrial gas turbine markets."

Hastelloy®-X is not a age-hardened material, so it doesn't become brittle at high temperatures, and its high oxidation resistance provides durability over many years of continuous use. "3D-printed Hast-X provides unique, robust, material qualities. Combining this with the fact that Vertex is AS9100 certified it will allow us to help our customers take programs from development to production much quicker," says Warden.

Planning to acquire more AM equipment in the future (after the Hastelloy®-X install next month), Steve Rengers, president of Vertex, describes his company's partnership with Velo3D as an evolving one. "We're interested in Velo3D because we value innovation, and we see them as a leader of innovation among advanced LPBF systems," he says. "Velo3D's technology—the non-contact recoater, and the ability to do challenging geometries without supports—is a differentiator. That's what Vertex is all about as well, so it's a great collaborative relationship we're looking to expand upon."

Benny Buller, founder and CEO of Velo3D is enthusiastic about the partnership. “We have a true meeting of the minds with Vertex about the potential for AM to boost innovation and transform manufacturing in so many exciting ways,” he says. “Accessing end-to-end advanced 3D printing through a contract manufacturer is a valuable option for OEMs of every size looking to optimize supply chain efficiency.”

Rengers agrees and views the future of AM as an accelerating one. “We’re going to continue to see product development cycles shorten as AM has a significant impact on reducing manufacturing times,” he says. “This will be in defense-critical areas such as hypersonics as well as more traditional aerospace and aviation. We’re also seeing a lot of movement happening in areas such as alternative energy, remote-energy, and the extension of human lifestyle quality through orthopedic implants—and we are building our business supporting those needs with the best technology available.”

Going forward, Vertex will remain closely attuned to the pull of customer requests, Rengers says, rather than pushing them towards specific technologies. “Depending on the paths they’re taking, those are the machines and materials we will invest in,” he says. “As Vertex expands, the keys to innovation rely on the best people, the best processes, and the best equipment—and Velo3D is an important piece of that puzzle for us.”

In March, Velo3D announced plans to merge with JAWS Spitfire Acquisition Corporation (NYSE: SPFR) and become a public company.

To learn more about how Velo3D empowers engineers and designers to imagine more and additively manufacture nearly anything, follow Velo3D on LinkedIn or visit velo3d.com.

About Vertex

The pioneering spirit that drove Morris Technologies, Inc. to become the premier global supplier of additive metal printing services and capabilities is now fueling Vertex Manufacturing. Leveraging decades of experience with thousands of applications across the aerospace, medical, defense, oil & gas and consumer goods industries, Vertex is committed to delivering products and services that meet or exceed customers’ quality and schedule requirements, earning trust and conducting all aspects of what we do, and how we do it, with the highest levels of integrity: https://www.vertexmfg.com.

About Velo3D

Velo3D, one of Fast Company’s 2021 World’s Most Innovative Companies, empowers engineers and designers to imagine more and additively manufacture nearly anything with a fully-integrated patented solution of software, hardware, and process-control featuring Flow™ print preparation software, Assure™ quality assurance software and the Sapphire® family of laser powder bed 3D printers. Velo3D additive manufacturing solutions for 3D-printing high-value metal parts allow for previously impossible geometries, so businesses can make the mission-critical parts they need without compromise. Customers include some of the world’s most visionary companies, such as Aerojet Rocketdyne, Chromalloy, Honeywell, LAM Research and Raytheon Technologies. For more information, follow Velo3D on LinkedIn or visit velo3d.com.

# # #

Media Contact:

Renette Youssef, CMO

press@velo3d.com