Protolabs Doubles Down on Metal Additive Manufacturing With World's Largest Metal 3D Printer

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The digital manufacturing service provider has teamed with GE Additive to add its X Line large format 3D printer to its equipment portfolio

MINNEAPOLIS--(BUSINESS WIRE)--Apr. 21, 2020-- Digital manufacturing leader Protolabs (NYSE: PRLB) will soon 3D-print parts on the largest powder-bed metal additive system in the world—giving customers a powerful new way to get large-format metal parts. The GE Additive Concept Laser X Line 2000R machine will be added to Protolabs' production services in late summer 2020.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20200421005206/en/

Protolabs will further expand its additive manufacturing production capabilities with the GE Additive Concept Laser X Line 2000R, the world's largest powder-bed metal additive system. (Photo: GE Additive)

"Our customers, especially in the aerospace industry, have told us they need the ability to create larger parts with complex geometries," said Vicki Holt, president and CEO at Protolabs. "Through our partnership with GE Additive, we are responding by scaling up use of its cutting-edge equipment to further support our customers' metal production needs."

The DMLM (direct metal laser melting) machine achieves an extremely large build volume of 31.5 in. x 15.7 in. x 19.7 in. (800mm x 400mm x 500mm). The ability to additively manufacture parts of this size means that entire assemblies can be designed and printed as a single piece.

Dual 1000W lasers allow for fast manufacturing of large parts and serialized production volumes. This large-format machine also contains two build modules, which reduce downtime by allowing one build to take place while another is being set-up. Although the machine can be used with a variety of metal powders, Protolabs has chosen Inconel 718 to be the initial focus material to better serve its rapidly expanding number of aerospace customers.

Along with the X Line 2000R, to further grow its DMLM production capacity, Protolabs has added four more GE Additive Concept Laser M2 printers, capable of manufacturing parts up to 9.8 in. x 9.8 in. x 13.8 in. (250mm x 250mm x 350mm). This brings Protolabs' total DMLM machine count to more than 30 metal additive machines, all capable of producing AS9100-production parts.

"The pace of momentum at Protolabs continues to impress. I appreciate the continued investment and trust in our solutions—the X Line and M2 machines are very well-suited to exacting needs of the aerospace industry. I also value the close working relationship with Vicki and her team, which is built on similar beliefs and a shared vision for industrial scale additive manufacturing," said Jason Oliver, vice president & CEO, GE Additive.

In its ongoing effort to enhance and expand its production capabilities in additive manufacturing, Protolabs has invested in new post-processing equipment. A Solukon powder removal system that thoroughly removes trapped powder from internal cavities and complex geometries. Also, a new Ipsen vacuum heat-treat furnace will enable more in-house heat treatment. This will improve the consistency of mechanical properties of manufactured parts.

About Protolabs

Protolabs is the world's fastest digital manufacturing source for rapid prototyping and on-demand production. The technology-enabled company produces custom parts and assemblies in as fast as 1 day with automated 3D printing, CNC machining, sheet metal fabrication, and injection molding processes. Its digital approach to manufacturing enables accelerated time to market, reduces development and production costs, and minimizes risk throughout the product life cycle. Visit protolabs.com for more information.

About GE Additive

GE Additive, part of GE (NYSE: GE) is a world leader in additive design and manufacturing, a pioneering process that has the

power and potential to transform businesses. Through our integrated offering of additive experts, advanced machines and quality materials, we empower our customers to build innovative new products. Products that solve manufacturing challenges, improve business outcomes and help change the world for the better. GE Additive includes additive machine providers Concept Laser and Arcam EBM; along with additive material provider AP&C.

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