Caracol redefines Large-Format Metal Additive Manufacturing, with the launch of Vipra AM – its new integrated robotic metal 3D printing platform.

Game-changing new robotic large format metal DeD platform set to be unveiled at Formnext in Frankfurt.

**AUSTIN, TX / MILAN, Italy – [07 November 2024]** – In an exciting development for the additive manufacturing landscape, leading LFAM provider, Caracol, is introducing [**Vipra AM**](http://www.caracol-am.com/preview-vipra-am-formnext-2024)**: a revolutionary technology that transforms how large-scale metal parts are produced**. Looking to deliver on its mission of enabling manufacturing companies globally to produce advanced large-scale industrial parts efficiently and sustainably, Caracol’s new robotic platform will be unveiled at Formnext (booth C101 Hall 12.1) and aims to transform how large format metal components are made. With the most advanced manufacturing industries increasingly seeking solutions that balance performance with productivity, Vipra AM stands out as a powerful tool designed to meet these and more of their evolving needs.

**Vipra AM is a robotic large scale Direct Energy Deposition platform that leverages wire arc additive manufacturing processes, seamlessly developed into a hardware, software, and automation proprietary turnkey system**. The platform was created to maximize users’ flexibility, control, and performance, expanding LFAM’s possibilities to a broader range of applications.

“At Caracol, we believe that the future of manufacturing lies in combining a strong application focus with advanced innovative technologies that reshape the capabilities of industrial production lines”, states Francesco De Stefano, CEO of Caracol AM. “With Vipra AM, we’ve leveraged the extensive know-how developed over years working on advanced process control and software for Large Format AM with thermoplastics and composites materials, to develop a proprietary cutting-edge metal platform that combines state-of-the-art hardware and software, with advanced robotic monitoring and automation. Thanks to this innovative technology, we want to enlarge the possibilities of industrial manufacturers to produce their most complex large-scale projects.”

Adopting its **application-first approach**, Caracol spent years developing projects and scaling parts production with Vipra AM, to develop the best platform that could target specific needs and applications. Due to this extensive work, Caracol is unveiling two new configurations of Vipra:

* **Vipra XQ (Extreme Quality)** leverages Plasma Arc Deposition technology to produce extremely high-quality components with exceptional finishing and precision. It is best suited for applications that require superior strength and precision, and can process an incredibly broad range of metals, including – stainless steels and titanium alloys. The system is ideal for large-scale, high-strength, high-integrity parts for sectors such as aerospace (e.g. load-bearing brackets and structural components) and energy (e.g. valves, gauges and structural piping connectors).
* **Vipra XP (Extreme Productivity)** instead is focused on maximizing productivity, minimizing operating costs in the manufacturing process of complex large scale metal projects. Its unmatched throughput combined with its ability to print also aluminum and nickel-based materials, make the system ideal for parts where lead times and lightweight are critical, such as transportation industries (e.g. automotive components, aerospace pressure vessels, marine propellers) and lower-end architectural applications (e.g. sculptures, lightweight organic structures).

In both its different product configurations, Vipra AM was built to produce successfully advanced applications such as load bearing finished parts, lightweight structures, high-temperature, high durability autoclave and curing molds, cladding, repair, and on-demand spare parts.

"The launch of Vipra AM represents a significant breakthrough for the metal additive manufacturing industry," says Gianrocco Marinelli, Metal Additive Manufacturing Director at Caracol. "In today's competitive market, manufacturers face mounting challenges, from material waste and long lead times to the pressure of reducing costs while maintaining high performance. Vipra AM introduces cutting-edge capabilities and complements existing processes, enabling hybrid production models that combine legacy techniques with advanced metal deposition to help manufacturers optimize production lines, reducing waste, accelerating lead times, and driving overall efficiency without overhauling their entire operations."

Join Caracol at Formnext 2024 and see Vipra AM live for the first time!

Vipra AM will be officially unveiled at **Formnext** in Frankfurt, Germany, on **November 19, 2024**, at **4:00 PM**. Visit the team to see the platform firsthand at **Caracol’s booth C101 in Hall 12.1** from the 19th to 22nd November. For the official launch on November 19th, Caracol will host a panel discussion featuring LFAM industry experts and users, who will explore the synergies between polymer and metal large-format additive manufacturing and the fields of application. Following the discussion Caracol will be hosting a party to celebrate this exciting launch.

CARACOL

CARACOL was founded in 2017 in Milan, Italy, with the vision of pushing the limits of additive manufacturing in terms of scale, efficiency, and sustainability. The company accomplished this by developing an integrated technological platform, including both hardware and software, to produce advanced large-scale components. Through the integration of a patented extrusion head, the development of dedicated software - Eidos Manufacturing, and the use of robotic arms as movement support, Caracol offers an additive manufacturing technology for advanced components for customers in industries such as aerospace, marine, energy, design, and architecture. Heron AM manufactures parts such as jigs and molds for aircraft components, finished parts for yacht and boat superstructures, or revolutionary projects to initiate virtuous circular economy processes for the energy or design sectors. Vipra AM is the latest launched LFAM system to produce large-scale metal applications in the most demanding industries such as aerospace, energy, construction and shipbuilding. Today, the company has opened the largest LFAM production center in Europe, a production facility in Austin (TX), USA opened in August 2023, and a commercial office in Dubai, has a core team of over 80 international professionals with highly specialized competences, in areas such as mechanical engineering, automation, computational design, design for additive, and advanced manufacturing processes.

For more information, please visit Caracol website: [www.caracol-am.com](http://www.caracol-am.com/preview-vipra-am-)

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