Caracol’s Launches at Formnext 2024: Expanding Large Format Additive Manufacturing into New Manufacturing Frontiers

**AUSTIN, TX / MILANO, Italia – [19 November, 2024]** – Caracol, leader in large-format robotic 3D printing, is unveiling groundbreaking innovation for the world of LFAM at Formnext 2024 in Frankfurt, Germany. Highlights include the launch of the new DeD platform, **Vipra AM**, for high-performance metal deposition, and significant advancements to further productivity of its composite LFAM platform, **Heron AM**. The **unveiling of Vipra AM will take place on November 19th at 4 PM** at **Booth C101, Hall 12.1**, followed by a panel discussion with leading experts on the future of LFAM metal and composite 3D printing.

**From November 19-22, 2024, Formnext** will gather industrial manufacturing professionals and 3D printing experts from all over the world. This year, Caracol (**in Hall 12.1, Booth C101)** will be showcasing the transformative potential of LFAM, expanding its capabilities from composite to metal manufacturing, thanks to a new Direct Energy Deposition technology.

Caracol will present its two robotic industrial additive manufacturing platforms, **Heron AM** and **Vipra AM**. **Vipra AM**, a revolutionary industrial system for metals, integrates Wire Arc Additive Manufacturing (WAAM) processes into a turnkey system. This platform offers unmatched flexibility and control for producing large-scale metal parts, utilizing a broad range of materials like aluminum, nickel alloys, stainless steels, and titanium. Available in two configurations—**Vipra XQ** with Plasma Arc Deposition for maximum precision, quality, and material range, and **Vipra XP** with Cold Metal Transfer for efficiency and productivity—the platform caters to diverse industry needs, from aerospace and automotive, to energy and industrial machinery.

Key components of the Vipra AM platform include a 9-axis industrial robotic arm and advanced kinematics for complex geometries, alongside the **Eidos Manufacturing Software Suite** for slicing and monitoring, **Integrated sensors** provide precise monitoring of layer geometry, thermal conditions, and gas flow for consistent results and more, as well as the **Enclosure** developed to guarantee safety and control during operations.

Caracol’s **Eidos Manufacturing Software Suite** is available for both platforms adapted to the process’ specifics. The suite features the **Builder**, an intuitive interface for slicing, path and parameter control, and its newly released **IoT**, provides live process and machine monitoring, data logging, remote technical support, process alerts, and integration with third-party applications, to improve customer’s decision-making and operational efficiency. The suite will be visible on the new side machine **Control Totems** developed to facilitate operators’ activities.

Heron AM, Caracol’s robotic platform for composite 3D printing, now includes new productivity features such as the **automatic tool changer**. Given the modularity of its systems, Caracol wanted customers to be able to easily select the best end-effector for their every application – from the High Versatility to the High Flow extruders, quickly adapting the set up without the need of human intervention. Adopting a similar approach to its hybrid systems, which offer tool changing from 3D printing extruder to milling heads, Caracol aims to maximize its customer’s productivity.

Throughout the event, visitors can witness live Heron AM, which will be printing live with Airtech Advanced Materials Group resin, Dahltram® T-100GF (recycled PETG with Glass Fiber), while **Vipra AM will make its official debut on November 19th at 4 PM CET**. Caracol will also showcase a diverse range of large-scale applications produced in composite and metal, developed with key customers across sectors like Railways, Automotive, Marine, Aerospace, and Design.

Following the launch of Vipra AM, **Caracol will host a panel featuring leaders in the LFAM sector**, who will explore the evolution of the industry and discuss the synergies between metal and composite technologies. This panel will be held at **Caracol’s booth on November 19th at 4 PM CET** and will be moderated by Violetta Nespolo, Caracol’s Chief Marketing & Strategy Officer. Panellists include Filomeno Martina, CEO of WAAM3D; Franz Bayer, Technical Sales Additive Manufacturing at WEBER additive; Faisal Alamer, CEO of Namthaja; and Gianrocco Marinelli, Metal Additive Manufacturing Director at Caracol AM.

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After the panel, Caracol invites attendees to enjoy cocktails themed around Heron and Vipra, alongside music and snacks at its booth's bar area, a great way to network and celebrate.

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 the Caracol website: [www.caracol-am.com](http://www.caracol-am.com)

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