

Press Release

Industrial Scale: Introducing the EOS M4 ONYX, Charting a New Course for Metal Additive Manufacturing

FRANKFURT, Germany, November 18, 2025 – EOS, the leading supplier of responsible manufacturing solutions and a global pioneer in laser powder bed fusion (LPBF) additive manufacturing (AM), today unveiled the **EOS M4 ONYX** at Formnext 2025, setting new standards for industrial-scale metal AM productivity, reliability and sustainability.

"At EOS, our customers have always been at the heart of every innovation. The launch of the EOS M4 ONYX is a testament to our legacy as pioneers in additive manufacturing and our commitment to empowering manufacturers worldwide," said Marie Langer, CEO, EOS. "This optimized system was only made possible by the dedication and expertise of our global team, whose relentless pursuit of AM excellence continues to set new standards for the industry. Together, we are shaping the future of metal 3D printing productivity and responsible manufacturing, delivering the highest quality solutions for our customers."

Engineered for Demanding Industries – Designed to meet the needs of energy, defense, space, aviation, and semiconductor sectors, the EOS M4 ONYX delivers:

- Large build volume: 450 x 450 x 400* mm for larger, more complex parts (*including build platform)
- High productivity: Six (6) 400W lasers provide 50% higher throughput and reduce part costs by 30%
- Flexible processing: The **EOS M4 ONYX FLX** variant features four (4) 1kW beam-shaping lasers for enhanced speed and flexibility
- Process stability: Homogeneous gas flow and active temperature control ensure cleaner builds and shorter cycles
- Lower QA costs: Integrated error detection reduces quality assurance expenses by up to 50%
- Sustainability: More than 90% powder material recovery, lowering raw material costs and waste, supporting Responsible Manufacturing®
- Cleaner, safter operations: The **RFS Pro** filtration eliminates consumables and neutralizes hazardous condensate
- Reliable uptime: Proven technology delivers up to 97% system availability (OEE) with full-service contracts



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- Improved quality: EOS Smart Fusion minimizes supports and enhances surface quality, reducing post-processing
- Continuous production: Automated overnight starts and job changeovers in under 30 minutes, via the Grenzebach Dual Setup Station – EOS Edition

Advanced software and processing intelligence: Featuring best-in-class software innovations for efficiency, transparency, and process stability:

- EOS Build+ process innovations and Siemens control system unlock new productivity levels
- Open platform communications and web APIs enable seamless integration with digital workflows, reducing order-to-print lead times by up to 30%
- Early notification systems increase utilization by up to 30%
- Digital fingerprinting with statistical control cuts QA and non-destructive inspection efforts by up to 50%
- EOS Smart Fusion and Smart Fusion Replay minimize support and post-processing requirements, and beam-control capabilities double build speeds and expand geometric freedom

Integrated Peripherals & Partnerships – Supported by advanced peripherals and collaborative alliances, transforming it into a fully integrated metal AM production powerhouse:

- **RFS Pro:** Enables full powder reuse, eliminates consumables, and reduces hazardous waste by up to 90%, simplifying maintenance and enhancing productivity and sustainability
- Volkmann Automated Powder Handling EOS Edition: Delivers closed-loop, scalable powder management for continuous, cost-effective operation
- **Grenzebach Dual Setup Station EOS Edition**: Automates job exchanges in under 30 minutes, enabling true 24/7 productivity

"At EOS, we live by our longstanding commitment to efficiency, safety, and innovation. Those pillars along with AM manufacturing innovations from partners like Volkmann and Grenzebach, have culminated in our most productive metal AM system to date," said Sebastian Becker, Head of Product Management Metal at EOS. "Beyond the technical milestone of our RFS Pro, our customers will benefit from our deep collaborative relationships to successfully scale their AM production with confidence and consistency."



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Commercial Availability

The EOS M4 ONYX also features a sleek new design and efficient footprint, and will be commercially available in Q1 2026, with the EOS M4 ONYX FLX variant following in Q3 2026. Materials include titanium, nickel and stainless steel, with additional options available upon request. Visit the EOS M4 ONYX and meet the team behind it at **Formnext 2025**, **November 18-21**, **Messe Frankfurt**, **Hall 11.1**, **Booth D41**.

About EOS

<u>EOS</u> provides responsible manufacturing solutions via industrial 3D printing technologies to organizations around the world. Since 1989, EOS has shaped the future of manufacturing by enabling its customers to innovate and differentiate through expert guidance, technology and services, leveraging its end-to-end additive manufacturing (AM) industry partnerships. From strategy to education to production, EOS is the leading global partner for both metal and polymer AM solutions, accelerating time-to-market for its customers through high-quality production efficiencies and sustainable solutions.

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