

## Pressemitteilung

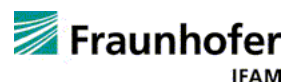
### Fraunhofer-Institut für Fertigungstechnik und Angewandte Materialforschung IFAM

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Forschungsprojekte, Kooperationen  
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## Wayland Calibur3 Installed at Fraunhofer IFAM Dresden

**Scaling up Next-Generation Additive Manufacturing: The Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM in Dresden has successfully installed a Wayland Calibur3 system, marking the institute's third facility dedicated to Electron Beam Powder Bed Fusion (PBF-EB) and reinforcing its leadership in advanced additive manufacturing technologies.**

Powered by Wayland's NeuBeam® process, Calibur3 offers a paradigm shift in electron beam melting. In contrast to conventional PBF-EB systems, NeuBeam® enables charge-neutral processing, allowing for greater process stability, easier surplus powder removal, and broader material compatibility, including highly reactive and high-performance alloys. This significantly expands the range of industrial applications and design freedom.

The new system enhances the capabilities of the Innovation Center Additive Manufacturing ICAM® at Fraunhofer IFAM Dresden. As a leading hub for research and industrial application, ICAM® combines state-of-the-art equipment with deep expertise in powder metallurgy, process design, and materials characterization.

With the addition of Calibur3, novel material concepts, resource-efficient fabrication of complex geometries, and the integration of simulation and machine learning to achieve first-time-right production are in the focus of the developments. These core research directions contribute directly to improving sustainability, performance, and digitalization in additive manufacturing.

"We see Calibur3 as a major step forward in expanding our research portfolio in next-generation additive manufacturing," says Prof. Thomas Weißgärber, Director of Fraunhofer IFAM Dresden. "It enables our teams to work on innovative solutions that span from materials development to intelligent process control."

The installation also marks the beginning of an intensified strategic collaboration between Wayland Additive and Fraunhofer IFAM Dresden. Together, both partners aim to drive joint research, application development, and industrial readiness of NeuBeam®-based solutions.

"Fraunhofer IFAM Dresden is an ideal partner for advancing the NeuBeam® technology platform," says Peter Hansford, Chief Revenue Officer at Wayland Additive. "Their combined expertise in materials science, simulation, and application engineering is essential for scaling up this technology."

As additive manufacturing continues to reshape industrial production across mobility, energy, and medical technology, the joint efforts between Fraunhofer IFAM Dresden and Wayland Additive will help position electron beam-based processes as a key enabler of high-performance, sustainable manufacturing.

The installation is financed by the project INNO-EB, supported by the European Regional Development Fund (ERDF), underlining the strategic importance of future-oriented manufacturing technologies for regional and European

innovation ecosystems.

wissenschaftliche Ansprechpartner:

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[https://www.ifam.fraunhofer.de/en/Aboutus/Locations/Dresden/pressemitteilungen/Wayland\\_Calibur3.html](https://www.ifam.fraunhofer.de/en/Aboutus/Locations/Dresden/pressemitteilungen/Wayland_Calibur3.html)

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Representatives of Fraunhofer IFAM Dresden and Wayland Additive in front of Calibur3  
Fraunhofer IFAM Dresden



View into the Innovation Center Additive Manufacturing ICAM® with all three facilities for Electron Beam Powder Bed Fusion (PBF-EB) available at Fraunhofer IFAM Dresden; left: Wayland Calibur3  
Fraunhofer IFAM Dresden