PRESS RELEASE

OPEN MIND at the Formnext 2024

*hyper*MILL® ADDITIVE Manufacturing

**Hall 12.0, Stand 120-A39**

Wessling (Germany), September 19, 2024 - OPEN MIND will be presenting its *hyper*MILL® CAD/CAM suite and the agile Hummingbird-MES at the Formnext exhibition from November the 19th to 22nd, at Stand 120-A39, Hall 12.0, at Messe Frankfurt am Main. The focus will be on *hype*rMILL® ADDITIVE Manufacturing, the CAD/CAM solution to control additive and subtractive processes. Visitors to the OPEN MIND stand can find out about the latest technologies and see additive workpieces programmed and machined with *hyper*MILL®.

*hyper*MILL®ADDITIVE Manufacturing expands the possibilities of 5-axis simultaneous machining for the Direct Energy Deposition (DED) process and Wire Arc Additive Manufacturing (WAAM). The NC codes can be conveniently programmed and automatically simulated to avoid collisions. As an end-to-end software solution, *hyper*MILL®supports efficient hybrid machining that combines additive and subtractive processes on one machine.

**Repairing instead of scrapping - with hybrid processing**

OPEN MIND will be demonstrating what additive, hybrid manufacturing can achieve at Formnext: even highly utilized parts can now be repaired using the hybrid machining process.

An illustrative example of this is a turbine blade. A blade was repaired on a HERMLE C 32 5-axis machining center using *hyper*MILL®with a Blum TC52 touch probe. This complex task includes the steps of blade inspection, removal of damaged area, material application, recording of shape and deformation, programming and machining. *hyper*MILL® VIRTUAL Machining makes this repair an efficient process. Based on the measured values, this software generates a digital twin of the workpiece and the machine situation for NC code simulation and optimization.

**Available image material**

The following printable images are available for download on the Internet:
<https://kk.htcm.de/press-releases/open-mind/>

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| Source: OPEN MIND***hyper*MILL®scanof the damaged turbine blade** | Source: OPEN MIND/HERMLE**The measuring probe checks the additive material application after *hyper*MILL®programming.** |

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| Source: OPEN MIND***hyper*MILL® simulationof subtractive machining**  | Source: OPEN MIND**Smart repair in three stages with *hyper*MILL®: prepared turbine blade, blade with material application and finished blade after additive and subtractive machining (from left to right)** |

**Available video material**

You can find the following video material on our YouTube channel:
<https://youtu.be/FCiOx3nLNSc?si=xDurdT9VOTo4_q3H>

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| Source: OPEN MIND**Efficient hybrid machining: automated repair of a turbine blade** |

**About OPEN MIND Technologies AG**

OPEN MIND Technologies AG is one of the world’s leading developers of powerful CAD/CAM solutions for machine and controller-independent programming.

OPEN MIND develops optimized CAD/CAM solutions that include innovative and unique features that can deliver significantly higher performance in both programming and machining.

*hyper*MILL® is a completely modular CAD/CAM solution that provides state-of-the-art CAM technologies on its own CAD platform: from 2.5D, 3D and 5-axis machining as well as turning strategies and solutions for additive manufacturing, HSC and HPC machining. Whether automation, simulation or virtual machine – trendsetting technologies expand the product range and enable continuous digital process chains. Special applications, seamless interaction with all popular CAD solutions and exceptional customer service rounds out the company’s products and capabilities.

According to the “NC Market Analysis Report 2024” compiled by CIMdata, *hyper*MILL® is a leading, worldwide CAD/CAM solution. Innovative CAD/CAM technologies fulfill the highest demands in the aerospace, automotive, tool and mold manufacturing, production machining, medical, job shops, energy and semiconductor industries. OPEN MIND is a Mensch und Maschine company and has subsidiaries and qualified sales partners on all continents.

OPEN MIND's majority stake in manufacturing execution system (MES) developer Hummingbird expands the CAD/CAM manufacturer's product portfolio and enhances the range of connected digitalized manufacturing technologies.

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You can find more information at [www.openmind-tech.com](http://www.openmind-tech.com).

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