Synera and Materialise collaborate to streamline Additive Manufacturing Build Preparation with Magics SDK and Synera's AI Agents

[Bremen, 22. July 2025] – Additive manufacturing organizations often lose significant production time to manual build preparation workflows, with human intervention driving up operational costs. Today, Synera and Materialise announce their collaboration to establish direct connectivity between Magics SDK and Synera's agentic AI platform for engineers. This collaboration allows Synera users with access to Magics SDK to deploy additive manufacturing agents that handle design-to-print tasks autonomously, helping scale throughput while reducing manual effort and cost.

Industry-Leading Build Preparation Technology from Materialise

Materialise Magics is the leading software solution for additive manufacturing data and build preparation for over 30 years. Magics' automated part and build preparation workflows have been validated and adopted by AM facilities worldwide. The new Magics SDK, launched in 2024, allows for platform integration with Magics' powerful build preparation algorithms, including automatic and manual repair of file errors, part orientation optimization, support generation, and slicing capabilities. These tools enable AM engineers to prepare even the most complex models for successful printing, reducing failed builds and improving part quality.

Agentic Engineering Platform with Synera

Synera's platform enables engineering organizations to create and deploy collaborative AI agents that function as engineering experts, supplementing teams and autonomously addressing product development tasks. The platform's easy-to-use visual editor allows engineers to automate at multiple complexity levels – from simple tasks to complex AM end-to-end workflows thanks to fully-fledged multi-agent systems that seamlessly integrate with tools like Materialise's Magics SDK.

The initial Materialise Magics SDK connector for Synera will provide comprehensive capabilities:

- Automated file repair and preparation directly from Synera
- Generation and customizion of support structures
- Advanced file editing and modification

This will enable users to create end-to-end automation workflows for additive manufacturing, significantly reducing build failures and ensuring models are properly prepared before printing. Combined with other additive manufacturing solutions in the Synera marketplace, users can manage the complete AM workflow from design to production thanks to connections to other tools like nesting, build process simulation and 3D AM machine software.

Driving Industrial Adoption of AM Together

Both companies see this collaboration as part of a broader industry effort to accelerate additive manufacturing adoption. Materialise, a founding member of the Leading Minds Consortium alongside other global AM leaders has led by example with its commitment to industry-wide collaboration. The Leading Minds Consortium was formed to facilitate knowledge sharing and overcome barriers to industrial AM adoption, focusing on standardization, education, and technology development.

This partnership between Materialise and Synera aligns perfectly with these goals, addressing one of the key challenges in AM workflows - efficient, automated build preparation capabilities

integrated in the design-to-print workflow. The connection between Materialise Magics SDK and Synera's platform represents a practical implementation of the collaborative approach championed by the Leading Minds Consortium to advance the AM industry.

"Our customers are already transforming their engineering operations with Synera by handing over repetitive work that all engineers dread to AI agents that autonomously optimize and prepare complex designs with less human intervention. Adding Materialise's industry-leading build preparation capabilities enables our users to create comprehensive AM workflows that prevent build failures due to file preparation issues while standardizing and digitizing their processes." – Andrew Sartorelli, Partner & Product Management Lead at Synera

This focus on practical automation and customer needs aligns perfectly with Materialise's vision for their technology:

"With the Magics SDK, we're opening decades of additive manufacturing expertise to help manufacturers automate and scale their workflows," said Gilles Claeys, Partnership Manager at Materialise. "The connection with Synera allows for a tighter integration between design and build preparation workflows, providing designers with immediate feedback on manufacturability and build optimization directly within one environment."

This integration was driven by some companies leading the path in industrializing Additive Manufacturing, like BMW.

"As an engineer working in additive manufacturing for years, performing file repairs repeatedly on hundreds of parts is one of the most time-consuming yet critical tasks in the workflow. Having Materialise's robust AM capabilities integrated into Synera's automation platform means we can now set up and adapt the build preparation to our own workflows to automatically identify and fix common issues. This not only saves hours of tedious manual work but also ensures consistent quality across all projects." – Johannes Kolb, Engineer at BMW AG

The Materialise Magics SDK connector will be available in the Synera marketplace from today on.

About Materialise:

Materialise incorporates more than three decades of 3D printing experience into a range of software solutions and 3D printing services that empower sustainable 3D printing applications. Our open, secure, and flexible end-to-end solutions enable industrial manufacturing and mass personalization in various industries — including healthcare, automotive, aerospace, eyewear, art and design, wearables, and consumer goods. Headquartered in Belgium and with branches worldwide, Materialise combines the largest group of software developers in the industry with one of the world's largest and most complete 3D printing facilities

About Synera:

Synera is a platform for process automation in engineering, founded in 2018 by Dr Moritz Maier, Sebastian Möller-Lafore and Daniel Siegel and headquartered in Bremen. The company is revolutionising the world of engineering, with the aim of fundamentally changing the way people work.

Synera enables engineers to efficiently automate manual processes. This frees highly-skilled

experts from repetitive tasks and enables them to solve even highly complex development tasks faster and more effectively. The platform integrates seamlessly with existing CAx tools and processes, increasing scalability.

The focus is on automating engineering workflows and connecting previously siloed software solutions. All agents leverage these workflows and can be combined into collaborative multiagent systems to extend the engineering team into a digital workforce.

Synera's customers include Volkswagen, EDAG, Brose, Stihl, Miele, Airbus and NASA.

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