

## Siemens adds material modeling to Simcenter through acquisition of MultiMechanics

- **Acquisition to expand ability to create a comprehensive digital twin with addition of material modeling**
- **Siemens to integrate MultiMechanics' TRUE Multiscale simulation technology with Simcenter 3D software to accelerate innovation and adoption of advanced materials**

Siemens announced today that it has signed an agreement to acquire MultiMechanics, Inc., developer of MultiMech finite element software that helps companies virtually predict failure in advanced materials at an unprecedented level of speed and accuracy. The company plans to integrate MultiMechanics into Siemens Digital Industries Software, which will add the ability for customers to create a digital twin of materials by closely integrating materials engineering with part design, performance engineering, and manufacturing through the unique TRUE Multiscale™ technology for a broad range of material-driven applications. MultiMechanics' technology helps companies to efficiently predict material properties and behavior, including failure starting at the microstructural level, at an unprecedented level of speed and accuracy. This unique technology will be incorporated into Simcenter™ software within Siemens' Xcelerator portfolio, implementing materials engineering into the digital workflow and establishing a pervasive link between material developers, manufacturing process developers and part designers.

"The addition of this technology enables our customers to build a digital twin of materials, which will help to shrink the innovation cycle of new products and materials, possibly saving millions of dollars and several years in development and

certification in aerospace, automotive and other sectors,” explains Jan Leuridan, Senior Vice President, Simulation & Test Solutions, Siemens Digital Industries Software. “Customers will have the ability to fully exploit the potential of advanced materials to optimize weight and performance in an efficient way that is not possible with classical, test-based, approaches.”

“We are excited to join Siemens and the Simcenter family,” says Flavio Souza, President and CTO, MultiMechanics, Inc. “The combination of the TRUE Multiscale technology of MultiMechanics with Simcenter 3D software will provide a strong basis for further innovation, enabling an expansion of scope of structural simulation to include multi-physics support for applications such as minimization of part distortion, prevention of voids during material flow, and prediction of visco-elastic acoustic properties.”

Digitalization, or the fourth industrial revolution, is happening today, causing disruption in the process and discrete industries, and blurring boundaries between domains, merging the virtual and real world, hardware and software, and design and manufacturing. In this dynamic environment, the ability to meet rapidly changing consumer preferences and requirements with insights and data is essential and can only be achieved through digital twins that represent and validate what is possible through a complete end-to-end workflow. Siemens' acquisition of MultiMechanics further expands the ability to create the most comprehensive digital twin by integrating structural computer-aided engineering (CAE) with detailed materials modeling through TRUE Multiscale technology, for a broad range of materials, including polymers, metals, composites, and ceramics. Manufacturing technologies such as injection-moulding and additive manufacturing will see immediate applications, as the digital twin of materials can account for manufacturing variability and imperfections, identify the root cause of material failure at microstructure level, optimize material microstructure for best performance, and enable the creation and virtual testing of new material systems.

“We are confident that as part of Siemens, MultiMechanics' technology can accelerate innovation in, and adoption of, complex materials, including the further penetration of composites in the automotive and aerospace industries,” said Nicolas Cudré Maroux, Chief Technology Officer of Solvay, a major customer and shareholder of MultiMechanics.

“The accuracy and speed afforded by MultiMechanics, and its efficient integration with commonly used commercial finite element software packages is changing the way we develop new materials and interact with our customers,” added Mike Blair, EVP Research and Innovation Composite Materials at Solvay.

The acquisition is due to close in November 2019. Terms of the transaction were not disclosed.

For further information on Simcenter, please see [www.siemens.com/simcenter](http://www.siemens.com/simcenter).

Siemens Digital Industries Software is driving transformation to enable a digital enterprise where engineering, manufacturing and electronics design meet tomorrow. The [Xcelerator portfolio](#) helps companies of all sizes create and leverage digital twins that provide organizations with new insights, opportunities and levels of automation to drive innovation. For more information on Siemens Digital Industries Software products and services, visit [www.sw.siemens.com](http://www.sw.siemens.com) or follow us on [LinkedIn](#), [Twitter](#), [Facebook](#) and [Instagram](#). Siemens Digital Industries Software – Where today meets tomorrow.

### Contact for journalists

Natalie Navales

Phone: +1 314 264 8671; E-mail: [Natalie.Navales@siemens.com](mailto:Natalie.Navales@siemens.com)

**Siemens Digital Industries (DI)** is an innovation leader in automation and digitalization. Closely collaborating with partners and customers, DI drives the digital transformation in the process and discrete industries. With its Digital Enterprise portfolio, DI provides companies of all sizes with an end-to-end set of products, solutions and services to integrate and digitalize the entire value chain. Optimized for the specific needs of each industry, DI's unique portfolio supports customers to achieve greater productivity and flexibility. DI is constantly adding innovations to its portfolio to integrate cutting-edge future technologies. Siemens Digital Industries has its global headquarters in Nuremberg, Germany, and has around 76,000 employees internationally.

**Siemens AG** (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. The company is active around the globe, focusing on the areas of power generation and distribution, intelligent infrastructure for buildings and distributed energy systems, and automation and digitalization in the process and manufacturing industries. Through the separately managed company Siemens Mobility, a leading supplier of smart mobility solutions for rail and road transport, Siemens is shaping the world market for passenger and freight services. Due to its majority stakes in the publicly listed companies Siemens Healthineers AG and Siemens Gamesa Renewable Energy, Siemens is also a world-leading supplier of medical technology and digital healthcare services as well as environmentally friendly

solutions for onshore and offshore wind power generation. In fiscal 2019, which ended on September 30, 2019, Siemens generated revenue of €86.8 billion and net income of €5.6 billion. At the end of September 2019, the company had around 385,000 employees worldwide. Further information is available on the Internet at [www.siemens.com](http://www.siemens.com).

Note: A list of relevant Siemens trademarks can be found [here](#). Other trademarks belong to their respective owners.