For Immediate Release

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CYBERNET SYSTEMS CO., LTD.

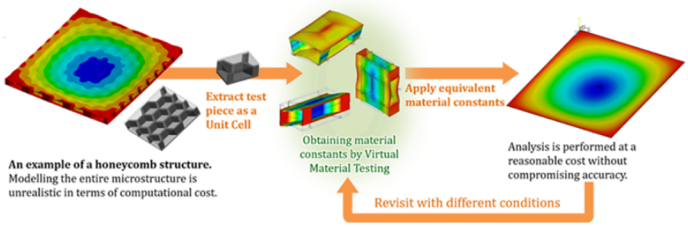
Multiscale.Sim's new interface for Moldex3D facilitates seamless integration between the two platforms.

The new interface provides engineers with a robust workflow that seamlessly integrates injection and resin transfer molding simulation and structural analysis.

Cybernet Systems Co., Ltd. (head office: Tokyo, President & CEO: Yoshiharu Shiraishi, hereinafter "CYBERNET") is pleased to announce that they have released a new version of Multiscale.Sim™, including an enhanced interface for Moldex3D® software, developed by CoreTech System Co., Ltd. (Head Office: Hsinchu County, Taiwan; hereinafter "CoreTech"). CoreTech also released a new Moldex3D version update earlier this year that supports the Multiscale.Sim coupling.

About Multiscale.Sim

Multiscale.Sim, a multi-scale analysis and simulation tool embedded in Ansys® Workbench™ environment, can evaluate equivalent materials properties using virtual testing[*1]. Developed, distributed, and supported by CYBERNET in Japan, Multiscale.Sim has been adopted by leading global manufacturing companies in Japan and overseas since its initial commercial release in 2007.

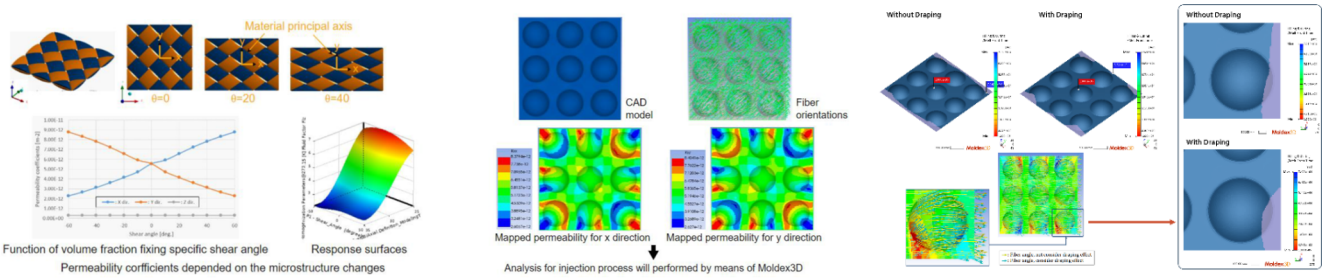


Analysis flow of Multiscale.Sim

Moldex3D interface for Injection and Resin transfer molding simulation

In 2021, CYBERNET and CoreTech entered into a Software Development Partnership agreement, initiating a close collaboration in both software development and marketing activities. Together, they have been promoting their solution to prospective customers in the APAC and EMEA regions.

The latest version updates of Moldex3D, the world-leading plastic injection molding simulation software, and Multiscale.Sim in 2024 features the new interface, catering to the needs of engineers seeking seamless simulation integration between resin transfer molding processes and structural analysis.



Analysis flow of RTM simulation: The permeability depended on microstructure is determined analytically using the virtual material testing. By mapping the information to the FE model, analysis for Impregnation process in Moldex3D can be performed considering accurate draping process. **Image courtesy:** CoreTech System Co., Ltd.

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The newly introduced interface seamlessly integrates drape simulation with Moldex3D allowing engineers to expand their analysis capabilities of the Impregnation process in Resin Transfer Molding (RTM). This integration considers the variations in permeability coefficient distribution resulting from microstructural modifications, enhancing the accuracy and robustness of the analysis.

The Moldex3D interface, as well as all the other new analysis features of Multiscale.Sim introduced through version updates time to time are incorporated into its standard Nonlinear license, thereby accessible to all Multiscale.Sim users at no extra cost*2. This eliminates the need to purchase additional modules or manage separate licenses for different functions.

For more information on Multiscale.Sim, please visit https://www.cybernet.co.jp/ansys/product/multiscale/en/

Webinar “Structural Analysis Considering the Molding History of Resin Molded Products”

Register for this free webinar to learn more about the new interface

- Date and time: 13 November 2024, from 18:00 JST (17:00 Taipei Standard Time)
- Pre-registration required. Please visit https://www.moldex3d.com/events/webinar/webinar-structural-analysis-considering-the-molding-history-of-resin-molded-products-cet/

Notes

*1: Virtual material test: Numerical material testing using FE model representing microstructure is performed and obtained macroscopic material responses. In many cases, virtual material testing not only provides results more quickly than actual tests, but also allows easier definition of deformation modes which are difficult to perform in real tests.

*2: A valid lease license or a perpetual license with active TECS (maintenance) is required to update the software to its latest version.

About CYBERNET

Since its establishment in 1985, Cybernet Systems Co., Ltd. has been recognized as a group of engineers proficient in both scientific and digital technologies, such as physics. The company has provided digital solutions and technical consulting services in areas including computer simulation, cybersecurity, AR/VR, and medical image processing, primarily to research, development, and design departments in manufacturing, as well as universities and government research institutions.

In recent years, the company has expanded its range of solutions to include the innovation of engineering chains in manufacturing centered on CAE, MBD, and MBSE, as well as the enhancement of supply chains through the use of PLM and IoT. Additionally, in the field of cybersecurity, Cybernet has built a system to provide advanced solutions that address the latest threats comprehensively.

Furthermore, we are leading the industry as a pioneer in medical AI by being the first company in Japan to obtain medical device approval and public health insurance coverage for software as a medical device.

More details on: https://www.cybernet.co.jp/englishMore details on: https://www.cybernet.co.jp/english

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