Release notes

V6.2

What's New in SIGMASOFT® 6.2

We are pleased to announce the release of the latest version of SIGMASOFT® Virtual Molding, which introduces a wide range of new features and improvements. This release focuses on delivering more accurate simulation results, simplifying project setup, and providing a more efficient and streamlined simulation and analysis process. In addition, numerous further enhancements and optimizations have been implemented across the entire software.

SMARTreport

The new *SMARTreport* functionality enables users to generate a comprehensive PowerPoint presentation containing the most important simulation settings and results with just a few clicks. The report structure can be customized to meet individual company requirements and saved using the user's own corporate design and PowerPoint template. SMARTreport supports beside results, views and videos also SIGMAinteract files, giving experts outside the workstation the option to manipulate and review results in 3D on their own PC. This allows for standardized, professional reporting while significantly reducing manual effort and ensuring consistency across projects.

Advanced Viscoelastic Material Model

A new three-dimensional viscoelastic material model has been introduced to significantly improve the prediction quality of filling simulations. By more accurately capturing time- and temperature-dependent material behavior, the model enhances flow prediction, pressure development, jetting and overall simulation reliability—especially under demanding processing conditions.

Material Fingerprint for Plastics

The new *Fingerprint* feature provides a clear and concise overview of processing-relevant properties for plastic materials. It visually summarizes key processing conditions and highlights both the characteristics and completeness of the underlying data set. This enables users to quickly assess material suitability and compare the quality of different material-data in a structured and intuitive manner.

Mirror Cutbox for Result Visualization

To safe calculation time, symmetrical molds can be cut and e.g. only a quarter is calculated. Yet the results which are cut accordingly were difficult to visualize. The *Mirror Cutbox* feature allows users now to efficiently exploit symmetry in result visualization. By mirroring simulation results along the cutbox plane, users can achieve a complete and more intuitive representation of results without additional computational effort, improving clarity and analysis efficiency.

Surrogate Model

With the introduction of the *Surrogate Model*, users can now replace very small gates with an equivalent Surrogate. This approach enables significantly improved mesh quality in critical gate regions while maintaining accurate flow behavior. Also, parts without critical thin-wall areas can now be meshed much wider with bigger finite volumes without relevant loss of precision. As a result, simulation robustness is increased and computational time can be reduced substantially.

Further Enhancements and Improvements

In addition to these major features, this release includes numerous smaller enhancements and refinements. These include user-defined results in the optimization perspective, new stress definitions, updates and extensions to the material database, as well as improved material assignment and copy-and-paste functionality within the results perspective. Together, these improvements further enhance usability, flexibility, and overall workflow efficiency.