Ansys Accelerates Passive Safety System Development

July 21, 2020
Ansys and DYNAmore support the rapid design and development of safe high-performance vehicles

PITTSBURGH, July 21, 2020 /PRNewswire/ --

Ansys_Vehicle_Safety

Key Highlights

- Ansys is supplying the BMW Group with Ansys LS-DYNA for passive safety system development in the next generation of safe, high-performance vehicles
- LS-DYNA users can implement a coherent, passive safety concept within a short development timeframe and with minimal use of hardware

Together with its European Channel Partner DYNAmore, [Ansys](#) (NASDAQ: ANSS) is supplying the BMW Group with Ansys LS-DYNA for passive safety system development in the next generation of safe, high-performance vehicles. Ansys LS-DYNA empowers users to optimize the design and analysis of passive safety systems — supporting more accurate predictions of vehicle behavior during collisions.

Vehicles must undergo extensive and rigorous crash test scenarios during the design and development phases before they can be proven safe. As vehicles become more complex, the regulations for passing these tests become more stringent. Ansys empowers vehicle manufacturers with simulation tools with a high degree of fidelity to predict vehicle responses to these tests — speeding product and development cycles.

Ansys solutions support virtual crash testing by enabling engineers to optimize structural design for energy absorption during crashes and improve the interplay between different restraint systems, such as seatbelt tensioners and both front and side airbags. Ansys LS-DYNA users can implement a coherent, passive safety concept within a short development timeframe and with minimal use of hardware.

Ansys LS-DYNA is a highly scalable multiphysics solver that simulates the behavior of most vehicle components as well as the complete vehicle within a fully coupled mathematical framework. LS-DYNA is scalable on high-performance parallel computer architectures, boasts an extensive range of material models, and facilitates rapid implementation of development requests.

"The thorough and in-depth analysis of the methods and algorithms in LS-DYNA initiated by the BMW Group was a very demanding project for us," says Ulrich Franz, Managing Director of DYNAmore. "The specific requirements of BMW Group with regards to the technical functionality and the integration into the existing processes and workflows were the main challenges that could only be met with great effort in all respects. DYNAmore works as an ongoing partner in software development, method development, user support and as an expert in materials science."

"Active and passive safety systems improve road safety and save lives by greatly reducing the risk of injury to occupants during unavoidable accidents. Following the successful acquisition of LSTC and integration of LS-DYNA into our product suites, Ansys' capabilities in this area are unmatched," said Shane Emswiler, senior vice president, Ansys. "Our many ongoing collaborations combined with our open-ecosystem and cutting-edge simulation solutions enable us to go one step further in the integration of passive and active security systems to meet the high demands of the automotive industry."

About DYNAmore

DYNAmore provides excellent support for many major automotive manufacturers in Europe and the United States in numerically solving nonlinear physical problems. The product portfolio includes the finite element software LS-DYNA, the pre- and post-processor LS-PrePost and the optimization software LS-OPT as well as numerous FE models for crash simulation (dummies, barriers, pedestrians, human models, etc.). For decades, the company's focus has been on support, sales, training, engineering services, software development and system integration.

About Ansys

If you've ever seen a rocket launch, flown on an airplane, driven a car, used a computer, touched a mobile device, crossed a bridge or put on wearable technology, chances are you've used a product where Ansys software played a critical role in its creation. Ansys is the global leader in engineering simulation. Through our strategy of Pervasive Engineering Simulation, we help the world's most innovative companies deliver radically better products to their customers. By offering the best and broadest portfolio of engineering simulation software, we help them solve the most complex design challenges and create products limited only by imagination. Founded in 1970, Ansys is headquartered south of Pittsburgh, Pennsylvania, U.S.A. Visit www.ansys.com for more information.

Ansys and any and all ANSYS, Inc. brand, product, service and feature names, logos and slogans are registered trademarks or trademarks of ANSYS, Inc. or its subsidiaries in the United States or other countries. All other brand, product, service and feature names or trademarks are the property of their respective owners.

ANSS – T

Contacts

Media   Mary Kate Joyce
         724.820.4368
         marykate.joyce@ansys.com

Investors Annette N. Arribas, IRC
         724.820.3700
         annette.arribas@ansys.com

ansys__inc__logo

C View original content to download multimedia:http://www.prnewswire.com/news-releases/ansys-accelerates-passive-safety-system-development-301096615.html

SOURCE Ansys