MSC.Software and ACUSIM Announce Direct Coupling of MD Nastran and AcuSolve for Fluid-Structure Interaction Analysis

Provides Mechanical Engineers Direct Access to Fast and Accurate CFD Solution for FSI

SANTA ANA, CA--(Marketwire – August 19, 2010) - MSC.Software, the leader in multidiscipline simulation solutions that accelerate product innovation and ACUSIM Software, Inc., a leading provider of computational fluid dynamics (CFD) solutions and developer of AcuSolve™, today announced the direct coupling of AcuSolve with MD Nastran for world-leading Fluid-Structure Interaction (FSI) simulations.

Utilizing MSC.Software's OpenFSI™ Interface, the structural and fluids solutions communicate without third-party software and enable an efficient solution for problems requiring complex fluid-structure interaction modeling.

“We are thrilled to support MSC.Software’s OpenFSI Initiative and be the chosen CFD solution for MD Nastran’s new FSI capability,” said Dr. Farzin Shakib, founder and CEO of ACUSIM software. “Through this partnership, our mutual customers will now be able to benefit from this directly coupled FSI solution, and the added capabilities with MD Nastran, to more efficiently solve a wide variety of problems that were previously not possible.”

“Coupling with a leading CFD solver such as ACUSIM’s AcuSolve adds advanced fluid-structure interaction capabilities to the existing coupled physics capabilities in MD Nastran,” said Sanjay Choudhry, Vice President of Product & Release Management at MSC.Software. “As a result, FSI problems in Aerospace, Automotive, Energy, Biomedical and other industries can now be solved as a coherent model, where the fluid dynamics and structural dynamics interact in concert allowing force-displacement data communication at each time step for true coupling.”

An integrated simulation system with a broad set of multidiscipline analysis capabilities, MD Nastran enables product manufacturers to simulate everything from a single part to complex assemblies. MSC.Software’s OpenFSI Interface enables coupling of MD Nastran with CFD solvers or other external services that implement the published APIs. Applications like automotive door seal aspiration, shock absorbers, flexible aircraft wings, aeroelasticity, wind turbines and heart valves benefit from reliable FSI simulations.

As the leader in FSI technology and the most established FSI solution provider in the CFD market, ACUSIM is the first company to offer direct coupled FSI technology and solutions, enabling the most
accurate and robust results, and best-in-class solutions for solving complex multidisciplinary design problems involving coupled fluid flow and structure phenomena. AcuSolve, the company’s general-purpose, finite element-based CFD solver, is a premier brand in the CFD market and highly differentiated by its robustness, fast speed and accuracy.

AcuSolve provides two powerful capabilities for simulating Fluid-Structure Interaction and response to fluid forces, implemented with MD Nastran:

- **Practical FSI (P-FSI):** predicts linear solid/structural responses.
- **Direct-coupled FSI (DC-FSI):** predicts large deformation and non-linear solid/structural responses.

MSC.Software and ACUSIM will be demonstrating AcuSolve’s direct coupling with MD Nastran during the upcoming webinar, “MD Nastran and AcuSolve coupling in SimXpert 2010 for industry leading FSI Simulations,” scheduled for August 31 at 5:30 a.m. PDT and 10:30 a.m. PDT. To register for the free webinar, please visit: [http://pages.mscsoftware.com/OpenFSIinMDNastran.html](http://pages.mscsoftware.com/OpenFSIinMDNastran.html)

**About ACUSIM Software, Inc.**

ACUSIM Software is a leading provider of advanced and powerful computational fluid dynamics (CFD) solver solutions. AcuSolve™ is a general-purpose, finite element based flow solver that is highly differentiated by its robustness, fast speed and accuracy. It can be used by engineers and scientists at all levels of expertise, either on a standalone basis or seamlessly integrated into existing engineering and scientific applications. AcuSolve is used globally in a wide variety of industries such as automotive, electronics, chemical, bio-medical, consumer products and energy, as well as at national labs and universities.


**About MSC.Software**

MSC.Software is a global leader of multidiscipline simulation solutions that help companies improve quality, save time and reduce costs associated with designing and testing manufactured products. MSC.Software works with thousands of companies worldwide to develop better products faster with simulation technology, software, and services. MSC.Software employs 1,000 people in 20 countries. For additional information about MSC.Software’s products and services, please visit [www.mscsoftware.com](http://www.mscsoftware.com).