Adams/Machinery Simulation Solution Continues its Market Momentum by Reducing Modeling Time by up to 80%

Latest release of Adams/Machinery expands machinery modeling & simulation for engineers

SANTA ANA, CA--(Business Wire – October 2, 2013) – MSC Software Corporation, the leader in multidiscipline simulation solutions that accelerate product innovation, today announced the new release of Adams/Machinery 2013.2. Adams/Machinery is a customized analysis software package that is fully incorporated in the Adams/View environment and specifically focused on machine design. It allows users to quickly build functional virtual prototypes from common machinery components such as Gears, Bearings, Pulley-Belts, Sprocket-Chains, Cables, and Motors; and to predict system dynamic responses.

The new release takes Adams to the next level for machinery design and simulation. Adams/Machinery 2013.2 provides a robust virtual prototyping solution for machinery design with a comprehensive suite of machine component libraries including chains, gears, belts, bearings, cables, a new electric motor module, plus improved ease of use for engineers. Adams/Machinery is developed for engineers working in industries such as Industrial Machinery, Heavy Industry, Automotive, Aerospace and other equipment markets.

Engineers can use Adams/Machinery to optimize existing designs or to predict system performance of new designs. The modeling time for machine components and systems has been significantly reduced for engineers (up to 80%) through built-in wizards and automation of dozens of element types and part connections that in the past had to be hand scripted by specialists.

The new modules and features available in Adams/Machinery 2013.2 include:

- **Belt**: predict load history, analyze belt slippage, study the effect of belt compliance, and avoid power transmission failure. A new 3D belt method for non-planar pulley-belt simulation is now available.

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- **Chain:** analyze vibration due to preloads, predict load history of sprockets, and avoid tensile failure. A new 3D chain method for non-planar sprocket-chain simulation is now available. The latest release has added a new discretized 3D method supporting roller chains.
- **Gear:** study the effect of backlash, predict contact force between gear pairs, study gear friction, and mitigate gear rattle. In addition to the current spur, helical, and bevel gears, three new gear types are now supported in the latest release including worm, rack and pinion, and hypoid gears.
- **Bearing**: predict bearing loads, study the effect of changing bearing parameters, and predict bearing service life
- **Cable**: calculate cable tension, assess load history on pulleys, analyze potential for cable slippage, and predict winching effects
- **Electric Motor**: a new electric motor module has now been added to calculate motor sizing, predict impact of motor torque on system, achieve precise position control, and more

In addition to the new features described above there have also been more general enhancements to Adams/Machinery. These enhancements largely focus on increased modeling flexibility and expanded support for parametric studies.

One of the key benefits of Adams/Machinery is that it can be used before CAD and embedded kinematic analysis tools to give users an accurate assessment of system level dynamic responses. With Adams/Machinery, you get modeling automation specific to machinery component types, providing early insight into design performance. The wizard-driven modeling environment means that Machinery models can be created prior to CAD information being available. Adams/Machinery drives and complements your CAD solution by giving you a high fidelity customized solution for solving component specific problems in the context of full system-level dynamics simulations. It is highly valuable to use before and after CAD to predict mechanical problems that lead to product failure and high warranty costs.

To learn more, please watch the on-demand webinar at the following link:
http://www.youtube.com/watch?v=hGWs39kgnQE&feature=youtu.be

About MSC Software

MSC Software is one of the ten original software companies and the worldwide leader in multidiscipline simulation. As a trusted partner, MSC Software helps companies improve quality, save time, and reduce costs associated with design and test of manufactured products. Academic institutions, researchers, and students employ MSC's

technology to expand individual knowledge as well as expand the horizon of simulation. MSC Software employs 1,200 professionals in 20 countries. For additional information about MSC Software's products and services, please visit: www.mscsoftware.com

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