

Simulation in the News

ANSYS TO ACQUIRE ESTEREL TECHNOLOGIES

ANSYS, Inc., www.ansys.com

May 2012

ANSYS has signed a definitive agreement to acquire Esterel Technologies, a leading provider of embedded software simulation solutions for mission-critical applications.

Esterel provides software and systems engineers with a solution to accurately model and simulate the behavior of the embedded software code to gain insight earlier in the design process and to trace that process to its requirements.

Embedded software is the control code built into the electronics in aircraft, rail transportation, automobiles, energy systems, medical devices and other industry products that have central processing units. For example, today's complex systems, like aircraft and automobiles, can have tens of millions of lines of embedded software code — for cockpit displays, engine controls and driver assistance systems. This spans both graphical user interface code and controls code.

Esterel complements the ANSYS vision by extending capabilities to encompass both hardware and software systems. The combined solutions will enable customers to gain greater insight into the behavior of the embedded software as it interacts with the hardware — or physical plant — including electrical, mechanical and fluidic subsystems. This combination will accelerate development and delivery of innovative products to the marketplace, while lowering design and engineering costs and improving product safety.

The transaction, anticipated to close in the third calendar quarter of 2012, is subject to customary closing conditions and regulatory approvals.

ENGINEERING SEAFLOOR OIL AND GAS PROCESSING BENEFITS FROM SIMULATION

Offshore, www.offshore-mag.com

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Engineering simulation technology can now simulate many subsystems to examine novel concepts and configurations, as well as physical conditions that equipment faces in the real world. One application is sand management, which targets the abrasive impact on downhole tools, processing and transport equipment, and pipelines. ANSYS technology is used to analyze a range of parameters, including fluid properties, particle size and distribution, wall materials, geometry, particle loading, and local flow and particle velocity impact.



A STEP AHEAD: JOHN DEERE

:K Magazin, www.k-magazin.de

March 2012

High reliability is a key development goal of the John Deere works in Germany. “With the help of ANSYS simulation software, we can provide our customers with sophisticated products,” said Michael Gölzer, in charge of simulation, instrumentation and test facilities. “We can easily compare different design options with respect to functionality and performance in real time.” The Mannheim facility uses ANSYS tools for a wide variety

of calculations, ranging from individual components and linear-elastic investigations to complex nonlinear analysis. “We now have our second generation of cabs designed completely virtually — there’s just a final check with a real prototype,” explained Mario Patino, head of the structural mechanics group.

MECHANICAL MEETS ELECTRICAL

Chip Design, chipdesignmag.com

Spring 2012

Two engineering worlds are intersecting, driven by power, heat and signal integrity. Physical effects can affect many levels of a much larger system. “Inside of an engineering organization, someone near the top has to worry about the entire system,” said Larry Williams, director of product management for electronics at ANSYS. “They have to think about boundaries between systems and subsystems, or between mechanical engineering and electrical engineering, because many firms are organized that way. When building a system, the optimum design can be found by considering the system as a whole, and additional margin is often found at those boundaries.” As the silos break down, the possibilities are mind-boggling.

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ANSYS