



Korea Institute of Energy Research (KIER) Selects VABS for Composite Blade Modeling

Salt Lake City, Utah (USA), March 10, 2015- [AnalySwift, LLC](#), a leading provider of efficient yet accurate modeling software for composites in the aerospace and energy industries, announced today that Korea Institute of Energy Research (KIER) has selected their VABS program for rigorous modeling of composite wind turbine blades. KIER strives to improve quality of life through supporting technology development related to the national energy policy, including the exploration of new energy sources, such as wind.

“We are very pleased to be selected by KIER for their composite blade design and analysis needs,” said Allan Wood, President and CEO of AnalySwift. “VABS is uniquely suited to address the challenges in modeling complex composite blades. Preliminary design work that previously took months can now be accomplished in weeks, reducing uncertainty, costs, and time-to-market. For instance, a real composite blade that would typically take over 3 hours to analyze using 3D finite element analysis (FEA) can now be done in less than 40 seconds using VABS, without a loss of accuracy. Even with hundreds of layers, all this is done on a laptop computer, without the need for heavy computing resources,” said Wood.

According to Dr. Wenbin Yu, CTO of AnalySwift, “VABS is quickly becoming the tool of choice for researchers and engineers worldwide modeling composite slender structures such as wind turbine blades, helicopter rotor blades, high aspect ratio wings, and other slender structural components. VABS is the only tool capable of rigorously decoupling an original 3D slender solid with complex microstructure into a simple engineering beam model. This is thanks to the unique mathematical approach underlying VABS, as well as development spanning over 15 years.”

Economies of scale for larger wind turbines has led to a trend of larger blades and the increased use of composite materials, which further complicates the engineering work. However, the powerful VABS software program enables customers to reliably model wind turbine behavior before any substantial cost is committed to building prototypes and testing. VABS is especially valuable to engineers early in the design process due to its ability to quickly deliver the complete set of both multiphysical properties and multiphysical 3D fields. Because it is highly optimized for efficiency, ply-level details are easily included in the analysis.

About AnalySwift

AnalySwift, LLC, is a leading provider of efficient high-fidelity design and analysis software for composite materials and structures, particularly cutting-edge technology for structural modeling and micromechanics modeling. AnalySwift’s revolutionary solutions are based on a powerful mathematical approach, providing customers a competitive advantage through dramatic reductions in engineering time, without sacrificing accuracy in multiphysics modeling. Utilizing technology licensed from Utah State University, as well as software developed at Georgia Institute of Technology, AnalySwift offers the best compromise between efficiency, accuracy, and versatility for multiphysics analysis of composite materials and structures. The technology has been supported, in part, by US Army, US National Science Foundation, US Air Force, Utah Science Technology and Research Initiative (USTAR), and industry. Additional information about AnalySwift can be found on the web at www.analyswift.com. For more information, contact Allan Wood, President and CEO of AnalySwift, 801-599-5879 or email allanwood@analyswift.com.