

AnalySwift's Release of VABS 3.6 Reduces Realistic Composite Blade Modeling to Seconds

Logan, Utah (USA), January 12, 2012- [AnalySwift, LLC](#), a leading provider of efficient high-fidelity modeling software for aerospace and energy composites and other advanced materials, announced today the release of VABS 3.6. This is the latest version of VABS, which is the tool of choice for efficient and accurate modeling of composite slender structures such as wind turbine blades, helicopter rotor blades, high aspect ratio wings, composite bridges, and other slender structural components.

The main feature of the VABS 3.6 is the improved method of optimizing the finite element mesh. Compared to the previous version, VABS 3.6 is several times faster for large problems, and the slower I/O (Input/Output) performance reported by some users was corrected. Furthermore, VABS 3.6 can handle much larger models, which cannot be analyzed by previous versions.

According to Dr. Wenbin Yu, CTO of AnalySwift, "For a realistic blade meshed with 200,000 degrees of freedom (DOFs), using a typical laptop, VABS 3.6 takes less than 20 seconds for constitutive modeling (Timoshenko model), while VABS 3.5 takes about 4 minutes for constitutive modeling. Of course, if one uses DLLs (Dynamic Link Libraries), it will be even faster as a significant portion of time for large problems is spent by I/O with hard drives."

"We are excited for the time and cost saving benefits this version of VABS provides both industrial and academic users of VABS," said Allan Wood, President and CEO of AnalySwift. "While VABS is already known for its efficiency in realistic multiphysics blade modeling, this version is even more appealing by truly taking it to the next level."

According to Yu, "VABS is the only tool capable of rigorously modeling three-dimensional (3D) slender solids with complex buildup structures, such as composite wind turbine blades." Wenbin continued, "The efficient high-fidelity tools offered through AnalySwift enable companies to bring products to market more quickly and at a lower cost with the best available compromise of accuracy, efficiency, and versatility."

The unique technology underlying VABS renders it the first truly efficient high-fidelity modeling tool for composite beams, saving users many orders of magnitude in computing time relative to more complex and time-consuming 3D finite element analyses (FEA), without a loss of accuracy. Engineers can now confidently design and analyze real structures with complex internal construction due to this unique efficient high-fidelity feature of VABS. For instance, structures as complex as real composite rotor blades with hundreds of layers can be easily handled by a laptop computer.

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 this technology, licensed from Utah State University and supported, in part, by the US Army, US Air Force, Utah Science Technology and Research Initiative (USTAR), and industry, AnalySwift offers the best compromise between efficiency, accuracy, and versatility for multiphysics analysis of composite materials and structures. More 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.