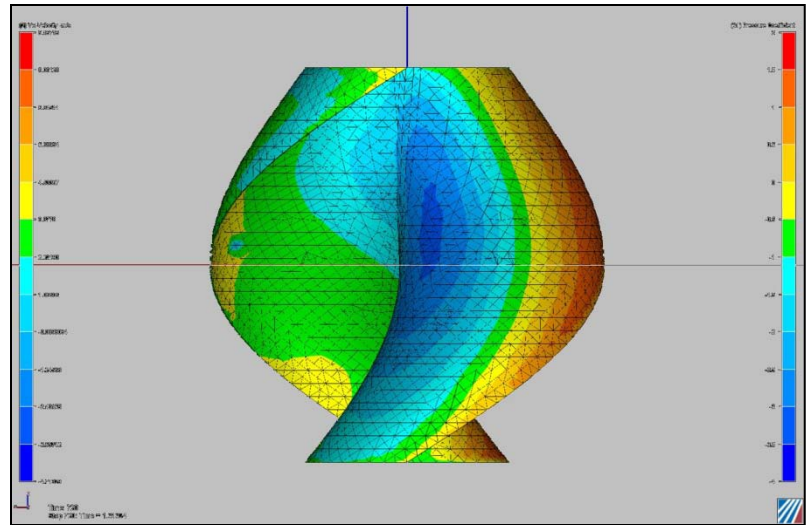


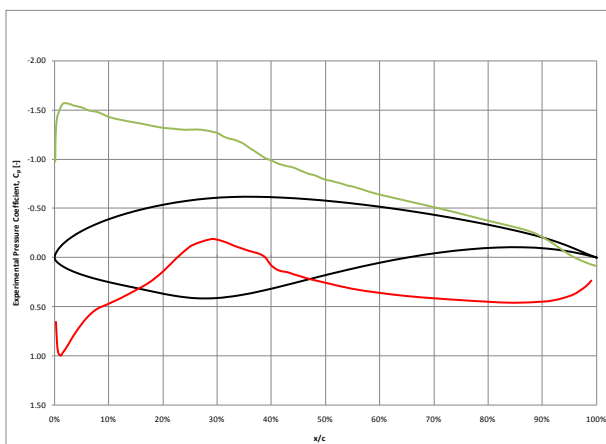
Wind Energy: Aerodynamic Design and Testing

DARcorporation has been offering aeronautical engineering software and consulting services since 1991. In 2004 we designed, built and tested our first Horizontal Axis Wind Turbine (HAWT), which was followed by a Vertical Axis Wind Turbine (VAWT) and many since. Over the years DARcorporation has developed a unique expertise in aerodynamic design of wind turbines.

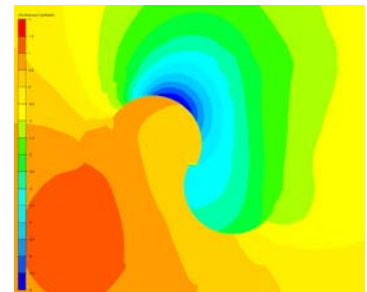


Aerodynamic Design & Analysis

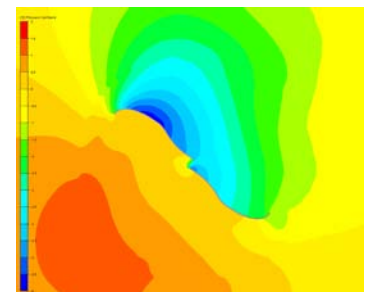
Blade Element Momentum (BEM) theory software is used for the initial aerodynamic design of the wind turbine blades. DARcorporation engineers



developed and customized the software to handle any type of wind turbine configuration and blade shape.



Airfoil design and analysis software is used to analyze and design the airfoils used on the blades. Computational Fluid Dynamics (CFD) software tools are used to simulate rotation and



quantify the full power curve of the wind turbine. Pressure distribution over the blades is calculated and torque (and thus energy) curves are constructed.

Once the aerodynamic design is finalized, a wind tunnel model can be designed, constructed and tested.