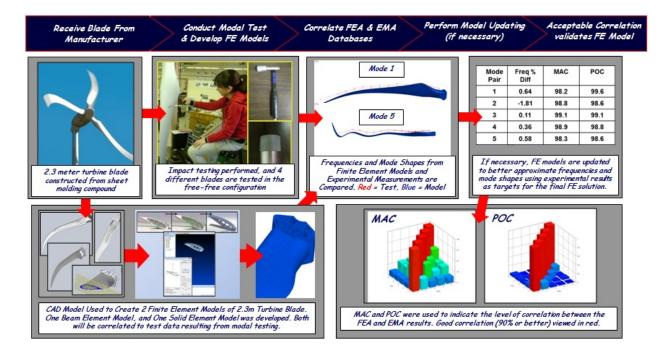


Structural Dynamics and Acoustic Systems Laboratory University of Massachusetts Lowell http://sdasl.uml.edu



Development of a Finite Element Model used for Dynamic Stress-Strain Predictions



Some current work at the UMass SDASL involves the characterization of wind turbine blades to be used for Dynamic Stress-Strain Predictions. Finite element model development and validation is performed throughout this work. Turbine blades are received from the manufacturer, and finite element models are developed which can predict a dynamic response. The actual dynamic response is acquired through a modal test, and the FE predictions are compared to the modal test results in attempts to validate the developed models.