

### ***Abstract***

*To help the development of wind turbine utilization and cost savings, an experiment was carried out and performed a stress simulation analysis on the turbine blade using an application before it was realized. For the type of wind turbine used is the Darrieus type which is a vertical-axis type turbine with a turbine diameter of 0.6 m; height 0.8 m; chord 0.2 m and using airfoil NACA 0015 as a blade with wind speed variable 3.88889 m / s; 4.44444 m / s; 5,27778 m / s. The simulation will be run with the Fusion 360 application and the simulation results will be examined based on the results of the power turbine calculation.*

***Keywords:*** *turbin angin, turbin darrieus, NACA 0015, stress simulation*