Möbius Strip Wind Turbine Ring

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For this project, I examined present day, three bladed horizontal axis wind turbines and tried to find a way to increase their output efficiency with post production modifications. The concept that came out of that was the Mobius strip wind turbine. The Mobius strip wind turbine is a Mobius strip encircling the outer edge of the blades of a wind turbine. Wind speeds at the tip of a wind turbine's propellers can exceed 170 mph and the Mobius strip acts as a sail, essentially "catching" the wind and increasing the RPM of the propellers, therefore increasing electricity produced. To test this theory, I built two three bladed wind turbines and set them ten feet apart from each other for a testing period of ten days. Using a logging voltmeter, I measured the electricity produced by each turbine, one turbine being unmodified, one turbine having been modified with a Mobius Strip. The results showed an almost 28.5% increase in electricity produced by the Mobius strip turbine over the unmodified turbine over the ten day period during which wind speeds did not exceed 18mph. I think with this conclusive evidence, an experiment on a larger scale is called for and look forward to approaching any interested investors or companies in an effort to improve my design and in the future, maybe even put it into production.

Awards Won: