

Supplementary Materials

Article

Effects of the Angled Blades of Extremely Small Wind Turbines on Energy Harvesting Performance

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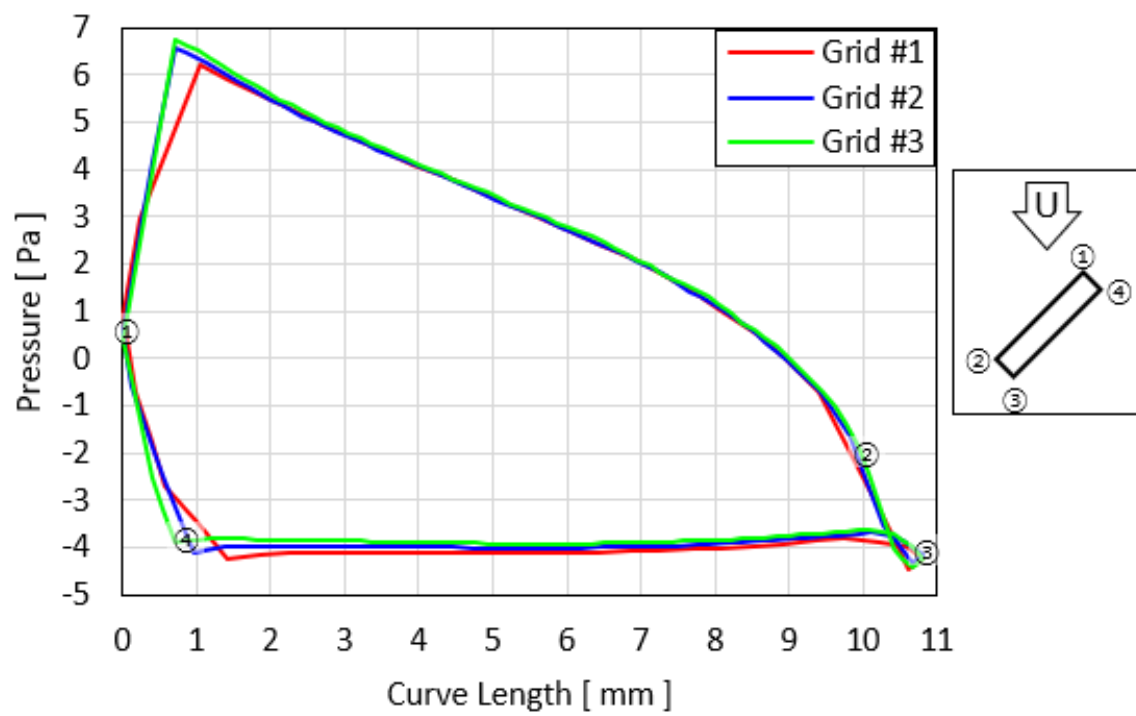


Figure S1. Result of the grid test. The vertices of the blade cross-section were named counterclockwise ①–④. Cross section of the blades The Grid #1 grid system exhibits a large difference around ① compared to the Grid #2 and × Grid #3 grid systems.

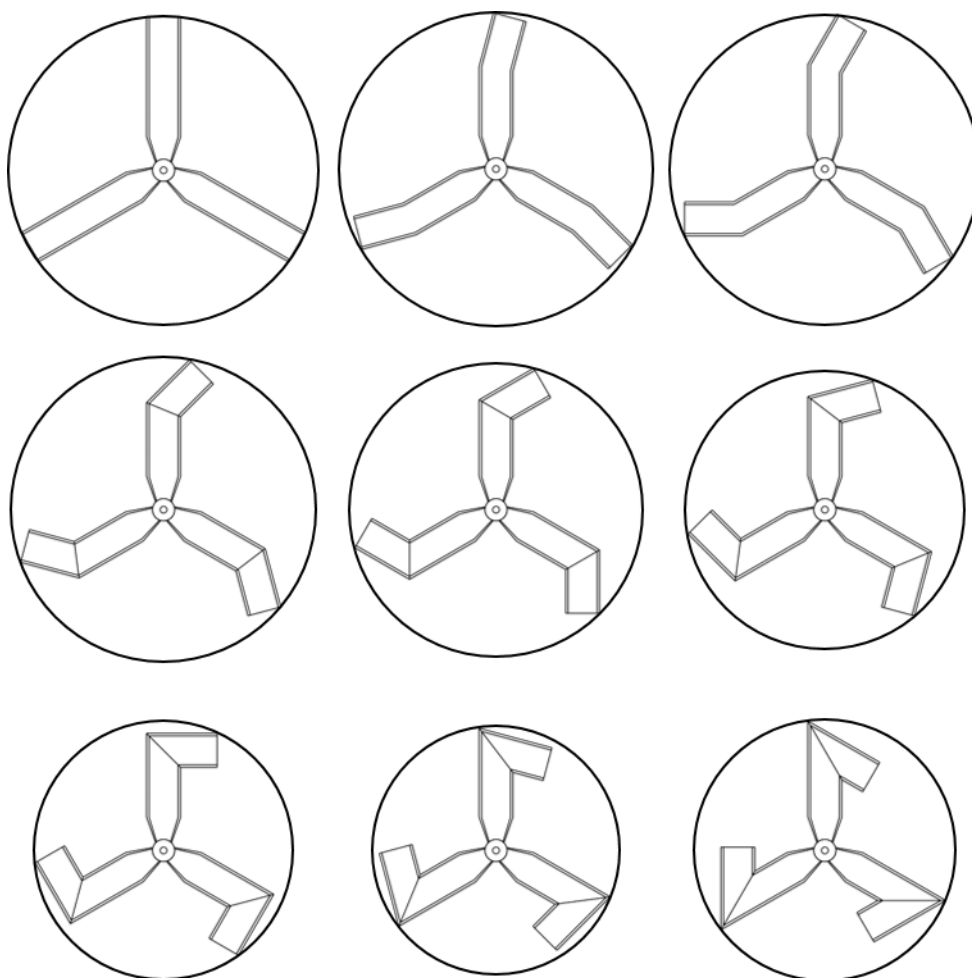


Figure S2. Rotor radii for the models. The radius of the A0–A90 and A105–A120 rotors is the distance from the hub to the upper and lower blade tips, respectively.

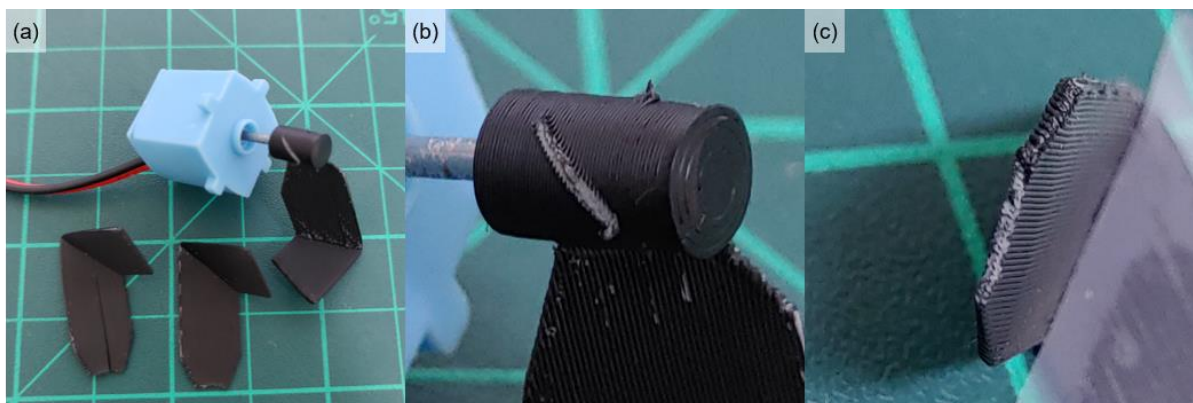


Figure S3. Fractured A105 rotor. (a) Rotor fractured at a wind speed around 25 m/s. (b) Fractured cross section of the hub. (c) Fractured cross section of the blade.

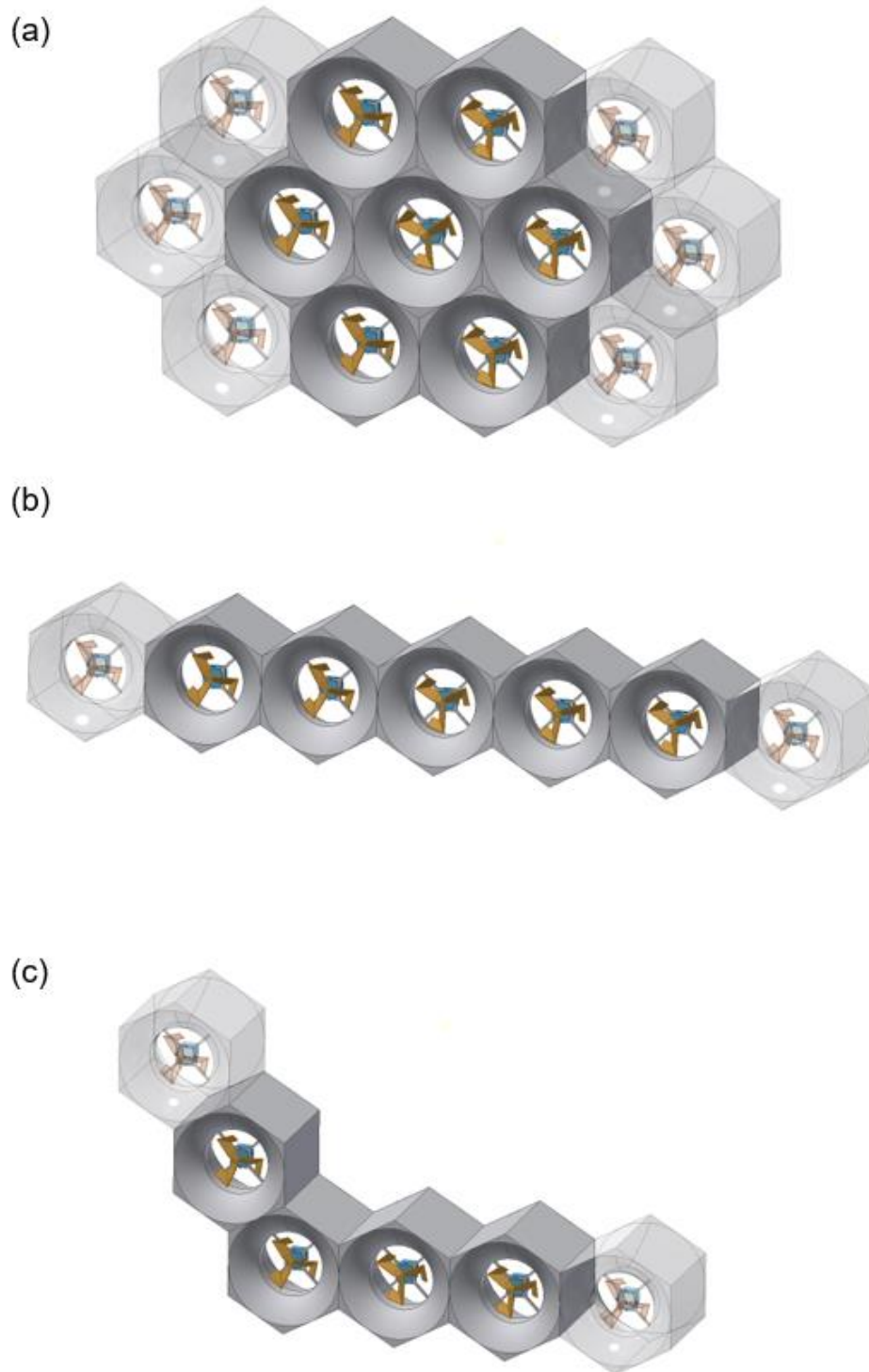


Figure S4. Multiple array illustration of SMWT. Various arrangements can be applied as desired: (a) grid array, (b) in-line array, and (c) arbitrary array.