

عنوان مقاله:

Numerical and Experimental Analysis of a Spiral Horizontal Axis Wind Turbine

محل انتشار:

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خلاصه مقاله:

This paper presents results of design, analysis, manufacturing and testing of a spiral horizontal axis wind turbine. In first step, modeling and computational fluid dynamic (CFD) analysis was performed. Helixblades angle for spiral rotors of outer and inner diameter of 0.85 and 0.45m, respectively was optimized. In thesecond step, as per optimized spiral rotor dimensions, a prototype was manufactured. Experiments were carriedout for torque and power calculations; .obtained results are discussed

کلمات کلیدی:

Wind turbine Numerical and experimental analysis Spiral horizontal axis Torque and power calculations

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