DESIGN AND OPTIMIZATION OF SIMPLE SAVONIUS VERTICAL AXIS WIND TURBINE FOR LOW WIND SPEED

By

Yudian Susanto
11112094

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MECHANICAL ENGINEERING – MECHATRONICS CONCENTRATION
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SWISS GERMAN UNIVERSITY

SWISS GERMAN UNIVERSITY
EduTown BSD City
Tangerang 15339
Indonesia

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Yudian Susanto

_____

Student

_____

Date

Approved by:

SWISS GERMAN UNIVERSITY

Mr Dena Hendriana, M.Sc., Ph.D,

_____

Thesis Advisor

_____

Date

Dr. Ir. Gembong Baskoro M.Sc

_____

Dean

_____

Date

ABSTRACT

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By

Yudian Susanto

Mr. Dena Hendriana, M.Sc., Ph.D, Advisor

SWISS GERMAN UNIVERISTY

The topic of renewable energy has been growing rapidly around the world. The interest of using wind turbine for electricity generation in Indonesia also has started to grow. Although most of wind turbine that used are horizontal axis wind turbines, but vertical axis wind turbines (Savonius) also have certain advantages. One of the advantages is that it able to extract wind energy Omni directionally, and it also suitable for urban area. The geometry of the Savonius turbine also pretty simple to manufacture.

Keywords: Vertical Axis Wind Turbine, Savonius, OpenFOAM, Solidworks, Paraview

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DEDICATION

I dedicate this works for my family.

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