

AUTOMATED NATA CUTTING MACHINE

By

Sesarius Egi Budiman
11301038

BACHELOR'S DEGREE
in

MECHANICAL ENGINEERING – MECHATRONICS concentration
FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY



SWISS GERMAN UNIVERSITY
The Prominence Tower
Jalan Jalur Sutera Barat No. 15, Alam Sutera
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August 2017

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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.



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ABSTRACT

AUTOMATED NATA CUTTING MACHINE

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SWISS GERMAN UNIVERSITY

Coconut water is the clear liquid inside coconuts and can be fermented using *Acetobacter aceti* subsp. *xylinum* to produce a chewy, translucent, and gelatinous dessert named *nata de coco*. Being the largest coconut producer in the world, Indonesia also contributes a lot in exporting *nata de coco* around the world. The latest data taken by Indonesian Ministry of Industry shows that in 2011, Indonesia exported 44,452 mt of *nata de coco*.

In South Lampung Regency of Indonesia, *Nata de coco* is one of the most reliable export commodities. One of the biggest *nata de coco* producing companies is *PT. Coco* and they are currently exporting their products mainly to Japan. However, Japanese are well known for their perfectionist character. They demanded the *nata de coco* to be precisely cubic, meaning the length, width, and height of the *nata de coco* cubes must be the same and perpendicular each other. Therefore, *PT. Coco* wants to develop a new cutting method for their product into perfect cubes.

Keywords: nata de coco, PT. Coco, cubic, cutting method





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~ VIELEN DANK FÜR ALLES ~

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