Enhancement and Simplification of Reverse Engineering Process on Dining Set Based Islamic Nuance Design Product

FINAL PROJECT

Submitted to fulfill as a requirement to

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JUNIVER ALKASIH PESOA

13 14 07268

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IDENTIFICATION PAGE

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Submitted by

Juniver Alkasih Pesoa

13 14 07268

Was approved on July 19th 2018

Supervisor

Tonny Yuniarto S.T.,M,Eng.

Examiner Team,

First Examiner

Tonny Yuniarto S.T.,M.Eng

Second Examiner

Dr. A. Teguh Siswantoro, M.Sc.

Third Examiner

Ir. B. Kristyanto, M.Eng., Ph.D.

Yogyakarta, July 19th 2018

Universitas Atma Jaya Yogyakarta

Industrial Engineering Faculty

Dean,

Dr. A .Teguh Siswantoro, M.Sc

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DECLARATION ORIGINALITY

Undersigned below:

Name : Juniver Alkasih Pesoa

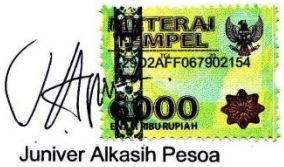
NPM : 13 14 07268

Hereby declare that my final project under the title "Enhancement and Simplification Reverse Engineering Process on Dining Set Ceramic with Islamic Nuance" is the result of my research in the 2017/2018 Academic Year which is original and contains no plagiarism from any work.

If there is any incompatibility with this statement in the future, then I am willing to be prosecuted and processed in accordance with the applicable provisions including to be revoked a Bachelor degree that has been granted Atma Jaya University Yogyakarta to me.

Thus this statement is made in truth.

Yogyakarta July, 10th 2018



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INTRODUCTION

Thanks to the presence of God Almighty for the blessing of His grace, the author can compile and complete this Final Project well and just in time. Final Writing is done to meet one of the requirements to achieve the degree of Bachelor of Engineering in Industrial Engineering Program, Faculty of Industrial Technology, University of Atma Jaya Yogyakarta.

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Yogyakarta July, 10th 2018

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ABSTRACT

Tableware is one of the ceramic handicraft products that are currently widely used by the community as an equipment to eat or decorate the room. One of the companies engaged in this field is PT. NPI. New ideas are being done by NPI today is the latest innovation in tableware dining set with Islamic Batik Ornament. However, special ceramic design processes in PT.NPI still use conventional or handmade technology, so it takes a long design time of about two to three months of the design process and the manufacture of master mold patterns. This will cause the company to experience delay in the fabrication process of ceramic dining set

To solve this problem, researchers use the technology of Computer Aided Reverse Engineering System. The method of data collection until the fabrication process is Reverse Engineering. Software to be used is ArtCAM 2015, PowerSHAPE 2017, PowerMILL 2016.

The output of this research is, getting some important parameters on the dining set design that is characteristic of Islamic. Dining set used is, Big Plate, Saucer, Bowl, Cup.

Keywords : Computer Aided Design (CAD), *Computer Aided Manufacturing (CAM)*, *Tableware Dining Set Ornament Islamic*.