

CHAPTER 6

CONCLUSION AND SUGGESTION

6.1. Conclusion

Implementation of CARESystem at the stage of development of dining design set tableware with Islamic nuance for Al Huda Jakarta Mosque in this research successfully done very well by researcher. The results showed that the final product is really in accordance with customer orders and R&D of PT. NPI. Based on design and fabrication stage of this ceramic product, author and PT. NPI success to improve the efficiency of design time and fabrication process into one month less for Big Plate and Saucer Product.

The total time for CAM process are 135 hours, and fabrication process are three weeks.

6.2. Suggestion

Further research on the development of core design of Big Plate products is needed because there are still defect in the Batik relief, also need further research on CAM analysis on the making process of Big plate and Saucer core cavity products. The last is need research about coloring for the final product.

REFERENCE

- Anggoro P. W, Bawono B, Sujatmiko I. (2015). Reverse engineering technology in redesign process ceramics: application for CNN plate. *Procedia Manufacturing*.
- Anggoro P. W, Bawono B, Wicaksono A, Jamari J, Bayuseno. A. P. (2016b). Applied of Reverse Innovative Design Methods of Insole Shoe Orthotic Product for Diabetic Patient. *Proceeding International Conferance Tribology And Engineering System*
- Anggoro P. W, Sujatmiko I, Bawono B. (2016c). Aplication of Technology 4-Axis CNC Milling for Manufacturing Artistic Ring. *Journal of Advances in Aoutomobile Engineering*
- Anggoro P. W, Widiyanto A, Yuniarto T. (2016a). Application of Semi Reverse Inovative Design Method to make Indonesian Endemic Animal Education Miniature. *Advances in Automobile*
- ASAKI. (2018, Januari Kamis 4). Asosiasi Aneka Industri Keramik Indonesia . Diambil kembali dari Blog Spot: <http://www.asaki.or.id/index.php/about-us/tentang-kami>
- Avelina, M. (2017). *Computer Aided Riverse Engineering System (CARESystem) Pada Produk Orthotic Otusole untuk Kasus Kelainan kaki*. Yogyakarta: Program Studi Teknik Industri, Fakultas Teknologi Industri, Universitas Atma Jaya Yogyakarta
- Chua'i C. K, Gay R, Hoheisel W. (1997). Computer aided decoration of ceramic tableware. *Part i: 3-d decoration. PII: s0097-8493(97)00041-1*
- Gunadi, Y. E. (2017). *Aanalisis Reverse Engineering Konvensional Ornament Islamic dari 2D ke 2.5D di Industri Keramik Dinding* . Yogyakarta: Program Studi Fakultas Teknnik Industri, Fakultas Teknologi Industri, Universitas Atma Jaya Yogyakarta
- Kliping. (2018, Januari Kamis 4). *10 motif batik yang populer dan mendunia* . Diambil kembali dari Blog Spot: <http://kliping.co/motif-batik-indonesia/>

Lamandau, L. (2015). *Reverse Engineering Approach in Making Emirate Large Plate (Dia-25cm) Design at PT. Doulton*. Yogyakarta: Program Studi Teknik Industri, Fakultas Teknologi Industri, Universitas Atma Jaya Yogyakarta.

Pujiastuti, L. (2018, Januari Kamis 4). *Diakui Dunia, Ekspor Batik RI Meningkat Setiap Tahun*. Diambil kembali dari Detik Finance : <https://finance.detik.com/berita-ekonomi-bisnis/d-3034083/diakui-dunia-ekspor-batik-ri-meningkat-setiap-tahun>

Sokovic M , Kopac J. (2006). RE (reverse engineering) as necessary phase by rapid product development. *Journal of Materials Processing Technology*, 6

Wijaya, A. R. (2017). *Pendekatan Reverse Engineering dari 3D Meshes ke 3D CAD/CAM pada Miranda Kerr Tea for One Teapot di PT. Doulton*. Yogyakarta: Program Studi Teknik Industri, Fakultas Teknologi Industri, Universitas Atma Jaya Yogyakarta

Xiuzi Y, Hongzheng L, Lei C, Zhiyang C, Xiang P, Sanyuan Z. (2008). Reverse innovative design—an integrated product design methodology. *Journal of Computer Aided Design*.

APPENDIX



Final Product

Minutes of meeting di Lab PP UAJY 27-10-16 (12.00-14.30)

Konsep Kerjasama Design NPI-Lab PP UAJY

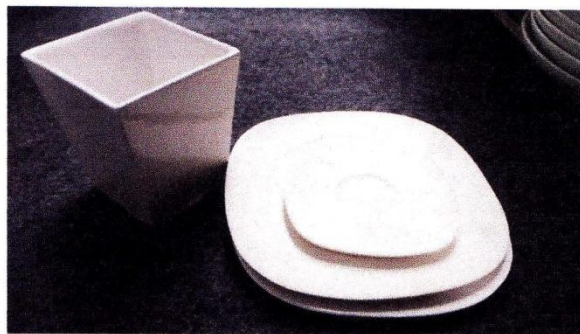
Kerjasama Development Product Dining Set ini bertujuan untuk menggabungkan 2 komponen antara teknologi permesinan modern yang dimiliki Lab PP UAJY dengan kolaborasi tersebut adalah Dining Set berupa Plate 27cm, 22cm, 16cm, Saucer, Cup dan bowl. Bentuknya berupa tetragonal (segi empat) dengan motif emboss batik Islamic Indonesia.

Tetragonal karena NPI belum pernah membuat Dining set tetragonal yang memiliki motif. Batik Islamic Indonesia dipilih karena ingin menyesuaikan sebagai souvenir exclusive masjid Al-Huda Jakarta.

Kerjasama NPI-UAJY

Tujuan desain ini akan digunakan sebagai Souvenir Exclusive masjid Al-Huda Jakarta, yang merupakan salah satu yang memiliki desain interior terbaik menurut arsitektur Jakarta.

Juga sebagai sarana pengembangan pariwisata religious di Indonesia



Time Plan Agreed

Aktifitas	Time Plan	
	Mulai	Selesai
CAD UAJY Core cavity	03-Apr-18	12-Apr-18
Material Sampai UAJY	25-Apr-18	
CAM Setting UAJY	04-May	09-May-18
Milling UAJY	14-May-18	04-Jun-18
Cetakkan NPI	07-Jun-18	
Trial Product NPI	12-Jun-18	