



BATTERED CHICKEN EGG MACHINE

A Thesis Presented to Faculty of the
Mechanical Engineering Department,
College of Engineering, Architecture and Technology

De La Salle University – Dasmariñas

City of Dasmariñas, Cavite

In Partial Fulfilment of the Requirements for the
ME Research Project 1 (MEET514f)

Submitted by:

Gerson John S. Gales

Francis Gerard T. Lomaad

Paul Joshua D. Zantua

Date Submitted

April 14, 2014



ABSTRACT

GALES, G.J., LOMAAD, F.G., and ZANTUA, P.J., Battered chicken egg machine, Bachelor of Science in Mechanical Engineering, De La Salle University – , Dasmariñas Cavite, April 2014. Adviser: Engr. Edgardo L. Alasco.

The conventional way of making battered chicken eggs involves manual deshelling, battering, and frying of eggs. Battered chicken egg is also very accessible to all Filipinos and more affordable than other food available in the market.

This conventional process was made mechanized by the researchers to improve the whole process of making battered chicken eggs. Also, the researchers aim to develop the process in making battered chicken eggs in terms of time efficacy, and consistency.

This thesis shows a new aspect in food processing of battered chicken eggs in the Philippines. Also, it will contribute a lot for utilizing a cleaner way of producing battered chicken egg.



Table of Contents

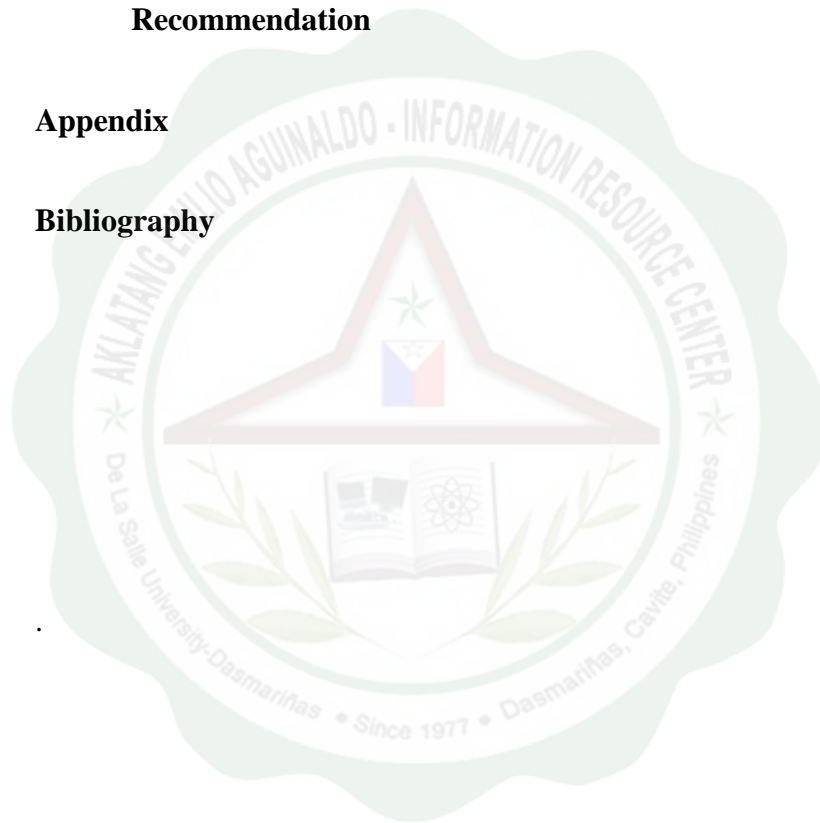
	Page Number
Title Page	i
Approval Sheet	ii
Acknowledgement	iii
Abstract	iv
Table of Contents	v
List of Tables	viii
List of Figures	ix
List of Appendices	x
Chapter 1: Introduction	1
Background of the Study	1
Statement of the Problem	2
Specific Objectives	2



Significance of the Study	2
Scope and Limitation of the Study	3
Conceptual Framework	4
Definition of Terms	4
Chapter 2: Review of Related Literature and Study	6
Review of Related Literature	6
Review of Related Study	8
Chapter 3: Methodology	12
Research Method	12
Data Collection	13
Sampling Design	13
Statistical Treatment of Data	14
Research Flow Chart	14
Chapter 4: Presentation of Data, Results, and Analysis	17
In terms of:	
Time Efficacy	18



Consistency	21
Chapter 5: Conclusion and Recommendation	22
Conclusion	22
Recommendation	23
Appendix	24
Bibliography	40





List of Tables

Table no.		Page Number
1	Batter Mixture (Ingredient and their amount)	7
	Time Efficacy	
2	Series of trials in terms of time efficacy	17
3	Paired samples statistics	18
4	Paired samples correlation	18
5	Paired samples test	19
6	Series of test (Production)	20
	Consistency	
7	Paired samples statistics	21
8	Paired samples correlation	21
9	Paired samples test	21



List of Figures

Figure no.		Page Number
1	Conceptual framework	4
2	AZEUS Egg Desheller	9
3	Hongle Quail Egg Desheller	9
4	AZEUS Egg Desheller 2	10
5	Ding-Han Machinery Co.,Ltd – Batter & Crumb Coating Machine	11
6	Bettcher Industries Inc. – Breeding Machine	11
7	Research flow chart	14



List of Appendices

	Page Number
Components Specification	24
Bill of Materials	28
Document Picture	29
Working Drawings	32
Curriculum Vitae	33

