

**Implementation of Quality Control in Manufacturing Company to Improve
Quality of Product**

**Penerapan Quality Control pada Perusahaan Manufaktur untuk
Meningkatkan Kualitas Produk**



By:

Name: Ahmad Faiz Al-Fatih

Student Id: 20180410493

INTERNATIONAL PROGRAM OF MANAGEMENT AND BUSINESS

FACULTY OF ECONOMICS AND BUSINESS

UNIVERSITAS MUHAMMADIYAH YOGYAKARTA

2022

**Implementation of Quality Control in Manufacturing Company to Improve
Quality of Product**

**Penerapan Quality Control pada Perusahaan Manufaktur untuk
Meningkatkan Kualitas Produk**



By:

Name: Ahmad Faiz Al-Fatih

Student Id: 20180410493

INTERNATIONAL PROGRAM OF MANAGEMENT AND BUSINESS

FACULTY OF ECONOMICS AND BUSINESS

UNIVERSITAS MUHAMMADIYAH YOGYAKARTA

2022

SUPERVISOR LECTURER APPROVAL
PAGE ESSAY

Implementation of Quality Control in Manufacturing Company
to Improve Quality of Product



Has been approved by the Advisory Lecturer

Advisor

Dr. Ika Nurul Qamari, S. E., M. Si.

NIK. 19690917199702 143058

22 Desember

Date, 2022

TEACHER APPROVAL PAGE

ESSAY

**Implementation of Quality Control in Manufacturing Company to
Improve Quality of Product**

Submitted by:

Ahmad Faiz Al-Fatih

20180410493

This thesis has been defended and ratified in front of the Board of Examiners of
the Management Study Program, Faculty of Economics and Business

Yogyakarta Muhammadiyah University

January 10, 2022

Consisting of :

Examiner Team Leader

Dr. Ika Nurul Qamari, S.E., M. Si.

NIK. 19690917199702 143 058

Examiner Team Member

Examiner Team Member

Munjiati Munawaroh, S.E., M.Si.

NIK. 19700405199303 143 024

Fauziyah, S.E., M.Si.

NIK. 19710505199702 143 057

Knowing

Head of Management Study Program

Faculty of Economics and Business

Yogyakarta Muhammadiyah University

Dr. R. Sri Handari W, SE., M.Sc.

NIK. 197104 0199409143038

STATEMENT

With this,

Name : Ahmad Faiz Al-Fatih

Student Id 20180410493

Declare that this thesis with the title: "**Implementation of Quality Control in Manufacturing Company to Improve Quality of Product**" there is no work that has ever been submitted for a bachelor's degree at a university, and to the best of my knowledge there is also no work or opinion that has been written or published by another person, except those quoted in this manuscript and mentioned in the Bibliography. If it turns out that in this thesis, it is known that some works or opinions have been written or published by other people, then the writer is willing to cancel the work.

Yogyakarta, December 22, 2022



Ahmad Faiz Al-Fatih

MOTTO

“Sing Tenang, Sing Ayem, Gusti Mboten Maringi Dalam Buntu.”

(Bapak)

DEDICATION

Alhamdulillah, all praise be to Allah SWT, who has given endless blessings so that the author can finish this work on time. Sholawat and greetings to the Prophet Muhammad SAW., the great role model for humanity. With the blessing of Allah SWT, the author dedicates this simple work to his beloved people who always support this struggle.

1. To the beloved parents, thanks for all the trust, support, prayers, and hard work that has been sacrificed so that I can get here.
2. To the sister and brothers who always give support, advice, and pray for this lecture.
3. To the supervisor, Mrs. Dr. Ika Nurul Qamari, S. E., M. Si.. Who always gives messages so that this thesis can be completed very well.
4. Friends in arms that the writer cannot mention one by one.
5. Thank you to all those who have helped and provided support during this lecture process until the writer could complete this thesis.

ABSTRACT

This study aims to examine quality control in the production process and selection of raw materials using Statistical Quality Control and the implementation of Zero-Defect Manufacturing carried out at ED Biru Aluminum to determine whether quality control in the production process and selection of raw materials can improve product quality. The object of this research is the company's five frying pan product numbers, namely numbers 12, 13, 14, 15, and 16 and the research subjects are manager and operational management at the company. This research method is observation and interviews conducted in the company. The data used is primary data taken at the company in the form of production processes, selection of product raw materials and production equipment. Secondary data used in the form of company profiles and production data. The results of the 35-day study showed that there were fin defects with a maximum of 5% defects, this was because the company implemented ZDM and quality control which had complied with the company's best procedures.

Keywords: Statistical Quality Control, Zero Defect Manufacturing, Frying pan

FOREWORD

Assalamu'alaikum Warohmatullahi, Wabarokatuh.

Praise and gratitude belong to Allah SWT, who has bestowed His grace, guidance, health, and gifts so that the writer can finish writing this thesis with the title " Implementation of Quality Control in Manufacturing Company to Improve Quality of Product."

This thesis aims to obtain a bachelor's degree at the Faculty of Economics and Business, University of Muhammadiyah Yogyakarta. The author realizes that in the preparation of this thesis can not be separated from the guidance and moral and material support from various parties, therefore on this occasion, the author would like to thank to:

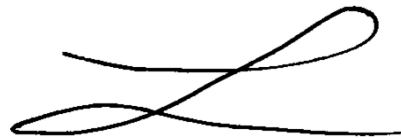
1. Allah SWT has given all the pleasures, good health, thinking, and blessing to be able to finish this thesis.
2. The writer's parents always supported in every process.
3. Prof. Rizal Yaya, SE, M.Sc., Ph.D., Ak., CA., CRP as the Dean of the Faculty of Economics and Business, University of Muhammadiyah Yogyakarta.
4. Mrs. Dr. Rr. Sri Handari Wahyuningsih, SE., M.Sc. as Head of the Management Study Program, Faculty of Economics and Business, University of Muhammadiyah Yogyakarta.
5. Mrs. Dr. Ika Nurul Qamari, S. E., M. Si. is a thesis supervisor who has guided and provided input patiently and sincerely as long as the author completed this paper.
6. Lecturers of the Management Study Program in the Faculty of Economics and Business of Universitas Muhammadiyah Yogyakarta.
7. Respondents who help the writer by participating in this research.
8. All parties who provided support, input, and direction in preparing this thesis.

May Allah SWT reward abundantly for the kindness that has been given during the process of completing this thesis. The writer realizes that this thesis is still far from perfect. The author expects constructive criticism and suggestions from

readers to improve writing in the future. Hopefully, this thesis can benefit readers in general and writers in particular.

Wassalamu'alaikum Warohmatullahi. Wabarokatuh.

Yogyakarta, December 22, 2022

A handwritten signature in black ink, consisting of a series of loops and curves that form a stylized, cursive representation of the name Ahmad Faiz Al-Fatih.

Ahmad Faiz Al-Fatih

TABLE OF CONTENT

SUPERVISOR LECTURER APPROVAL	i
TEACHER APPROVAL PAGE.....	i
STATEMENT.....	ii
MOTTO.....	iv
DEDICATION.....	v
ABSTRACT	vi
FOREWORD.....	vii
TABLE OF CONTENT	ix
TABLE DESCRIPTION	x
CHAPTER I.....	1
INTRODUCTION.....	1
A. Background	1
B. Research Question	5
C. Research Purposes	6
D. Research Benefit	6
CHAPTER II.....	8
LITERATUR REVIEW.....	8
A. Theoretical Framework.....	8
B. Previous Study	19
C. Conceptual Framework.....	22
CHAPTER III.....	25
RESEARCH METHOD.....	25
A. Type of Research.....	25
B. Subject of the Research.....	25
C. Type of Data.....	25
D. Technique Data Collection.....	26
E. Analysis Data Method.....	26
CHAPTER IV	29
RESULT AND DISCUSSION	29
A. Overview of Research Object	29
B. Data Collecting Result	36
C. Result And Discussion.....	38
CHAPTER V.....	46
CONCLUSION, RESEARCH LIMITATION, AND RECOMMENDATION	46
A. Conclusion	46
B. Research Limitation.....	47
C. Recommendation	48
REFERENCES.....	49
APENDIX.....	52

TABLE DESCRIPTION

Table 2. 1 The Previous Study.....	19
Table 4. 1 The Type of Frying Pan that studied	31
Table 4. 2 ED Biru Alumunium Visualization.	36
Table 4. 3 Check Sheet production of ED Biru Alumunium	38

TABLE OF FIGURE

Figure 2. 1 Shewhart Cycle	9
Figure 2. 2 Check Sheet	13
Figure 2. 3 Histogram	14
Figure 2. 4 Pareto Chart	14
Figure 2. 5 Flowchart.....	15
Figure 2. 6 Scatter Diagram	15
Figure 2. 7 Fishbone	16
Figure 2. 8 Control charts.....	17
Figure 2. 9 Example of Zero Defect Manufacturing (ZDM)	19
Figure 2. 10 Framework.....	24
Figure 4. 1 Organizational Structure of ED Biru Alumunium.....	30
Figure 4. 2 Picture of Ingot	32
Figure 4. 3 Used Oil Drum.....	32
Figure 4. 4 Stove in ED Biru	33
Figure 4. 5 Melting Furnace	33
Figure 4. 6 Frying pan Mold	34
Figure 4. 7 Filling Tool.....	34
Figure 4. 8 Lathe.....	35
Figure 4. 9 Spatula	35
Figure 4. 10 Production Process	41

APENDIX

Apendix 1 Documentation	52
Apendix 2 Interview Coding Result	57
Apendix 3 Turnitin Result.....	60