

**MINIMIZING THE NUMBER OF REJECTS ON 10' X 12' FIBERGLASS
ROOFING PRODUCTS IN NATURALITE INDUSTRIAL CORPORATION**

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Submitted by:
SUAREZ, Rogelio Jr., A.

Submitted to:
Engr. Orlando Lejos

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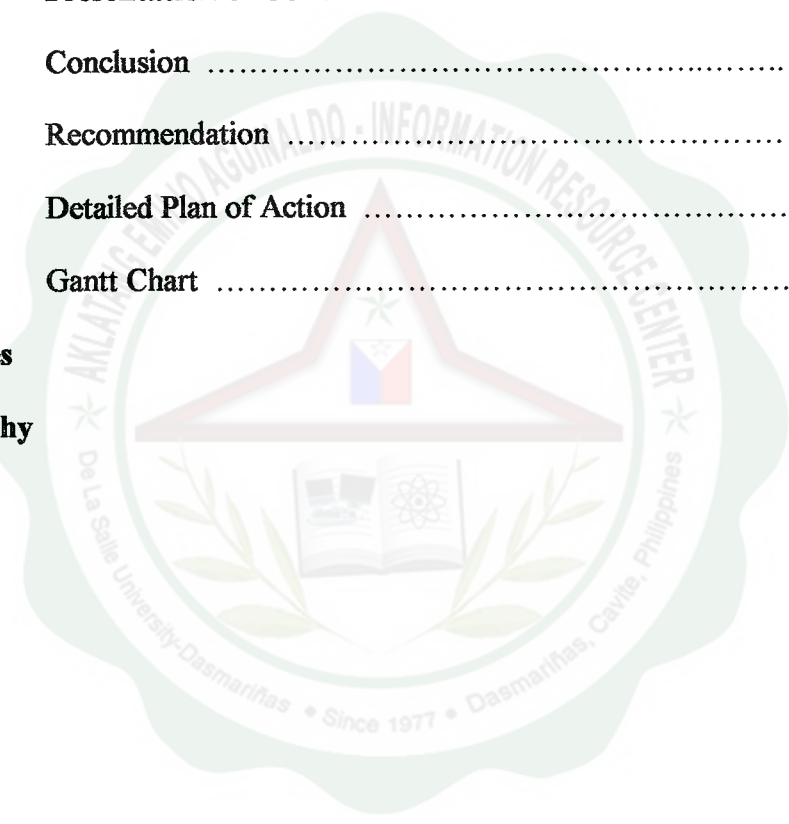
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Chapter I

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Naturalite Industrial Corporation is a privately owned producer of fiberglass products that started in the year 1985. The products include fiberglass sheets, rib type sheets, corrugated sheets, and basketball boards in a wide range of sizes and colors. Having separated from a producer of fiberglass products in Taiwan, Mrs. Lina Gonzales manages NIC after she received capital from Purefoods Corporation in exchange for the service to produce fiberglass. Some of NIC's well-known customers are from hardware and production plants.

NIC has been doing well in the past 20 years of service and there is a growth in the number of costumers. In lieu for that matter, NIC encounters some problems in terms of the quality of the products. In the year 2005, NIC encounters rejects in the production of 10'x12' fiberglass products. The causes of rejects are - traditional sun-drying process, which it takes 2 to 3 days in order to finish the procedure and production is greatly affected due to unpredictable weather conditions; production process is purely manual, wherein the quality of the finished products depends on the capability of the workers and; lack of total quality management. Workers in the production area left this unnoticed because their main concern is to meet the production quota and on time delivery date.

Products are produced during weekdays and the sole workers themselves execute rough quality checks on the finished products. The drying of the fiberglass product takes about 2 to 3 days and is the longest process in terms of time prior to the weather

conditions. The quality check is based on worker's experiences, since there is no quality control department to facilitate in that matter. An investigation is performed and discovered the relation between the quality of 10'x12' fiberglass product and number of output per unit from June 2005 to November 2005. The rejects in the 10'x12' fiberglass product have an effect on the profit of the company – an increase in liabilities and customer loss. NIC lacks quality control department that will facilitate these concerns; workers rely on experience in handling these concerns. Due to the various numbers of products they produce, the study focuses on minimizing the rejects in 10'x12' fiberglass roofing products. The main concern is in the area of production of 10'x12' fiberglass roofing product.

1.2 PROBLEM STATEMENT

Naturalite Industrial Corporation is experiencing 9.22% rejects in 10'x12' fiberglass roofing products.

1.3 OBJECTIVES OF THE STUDY

General

To minimize the number of rejects in 10'x12' fiberglass roofing products to 68.75%.

Specific

- To identify the causes of rejects in 10'x12' fiberglass roofing product and compute for NIC's loss in terms of monetary value.

- To improve the quality of 10'x12' fiberglass roof sheets through the application of well-developed techniques and principles involving total quality management.
- To provide a total quality management that improves the existing system of NIC.

1.4 SIGNIFICANCE OF THE STUDY

The study is a great importance to the author, company, employees, and the industry.

To The Researchers

The study increases the knowledge of the researchers in the production and quality control of 10'x12' fiberglass roofing products in NIC. The researchers gain a bird's eye view of processes and learn the basics of total quality management.

To The Company

NIC can apply these proposal in order to reduce the number of rejects in 10'x12' fiberglass roofing product. The study assists the company into reducing the allowable number of rejects and increasing the target output.

To The Employees

The workers are given suggestions on ways to improve the manual production of 10'x12' fiberglass roofing product. Employees become aware of the importance of improving the quality of the product.

To The Industry

The study promotes total quality management. The study deals with eliminating sources of rejects and suggests some ways in improving the quality and control of fiberglass products. All manufacturing firms are encouraged to apply some relevant

techniques and principles to aid in improving productivity and provide a better setting in the industry.

1.5 SCOPE AND LIMITATIONS

The study focuses on improving the quality control in the production of 10'x12' fiberglass roofing products. The study is completed through data gathering from June 2005 to November in the year 2005.

The study focuses on minimizing the number of rejects which involves the production of 10'x12' fiberglass roofing products. The limitation of the study is improving the quality of the 10'x12' fiberglass roofing products and its area of production.

1.6 METHODOLOGY

Observation

There is an observation in the production process of 10'x12' fiberglass roofing product. A significant number of rejects are taking place in this product that contribute to the liability of NIC. In line of the quality control problem, a thorough study in the approach of the management and workers are conducted.

Interview

There is an interview of the production manager and some of the workers in the production area. The issues and problems about the considerable number of rejects in 10'x12' fiberglass roofing product is discovered. Through the help of the gathered information in the interview, this study was formulated.

Research

A research is done in the library, Internet and other resources in order to provide a better view of NIC's problem and provide a solution.

1.7 DEFINITION OF TERMS

- Cobalt -** It is a bivalent, hard, magnetic, silver-white, metallic element. It is used in the production of magnetic and hard alloys that are resistant to high temperature, abrasion and corrosion.
- FRP –** This material is known as fiberglass-reinforced plastic.
- FRS -** This is an abbreviation of Fiberglass Roof Sheets
- Hardener -** It is a substance added to give paint or varnish.
- Resin -** The synthetic resins are prepared by polymerization and are used as plastics, varnishes, in adhesives and ion exchange.
- Styrene -** Liquid hydrocarbon obtained specially from ethyl benzene, used as the raw material for many plastics.