A Study in the Reduction of Defects in Producing Reflow Machine Parts in Eightech Techtron Philippines, Inc

A Practicum Study Presented to
The Faculty of the College of Engineering Technology
De La Salle University-Dasmariñas

In Partial Fulfillment of
The Requirement for the Degree of
Bachelor of Science in Industrial Technology

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MARCH 2006

Table of Contents

Chapter I

Introduction

1.1 BACKGROUND OF THE STUDY

Eightech Techtron Philippines Incorporation located in Epza Rosario, Cavite is in line with the assembly production which is divided into three operating lines namely Eightech Techtron Philippines Inc (ETC), Yokota Kondo Yamada (YKY), and Eightech Manufacturing Corporation (EMC). The ETC operates in different lines of production.

Eightech Tectron Philippines Inc. (ETC) which is in charge of producing the parts of air and nitrogen reflow for soldering machines. The parts are classified in different forms such as radiator, casing, heater, and blower fan. These are then transferred to YKY (Yokota Kondo Yamada) where the parts are being assembled and lastly, the EMC (Eightech Manufacturing Corporation) is in charge of painting the product and exporting it to other countries such as Japan, Taiwan, China and South Korea.

One of the major problems that this company is experiencing is the high defects in reflow machine parts. There are different divisions in the operation that are experiencing problems- the radiator section, casing, heater, and blower section. The radiator section, the common problem is leakage because of improper welding. In casing section, they encounter wrong encoding of program measurements which is done by the programmers then passed to the operators who will actual, work on the design. In the heater section, the operator experiences disconnection of heater terminal. And lastly in the blower section, the operator experience the disassembling of the blower fan blades that causes vibration to the

blower fan. This defects that the company encounter cost P 1,149,000 in a year and this results to the company's loss.

1.2 COMPANY PROFILE

Eightech Techtron Philippines Inc. (ETC) is a work place that assembles raw materials that create the parts of the reflow machine that is to be passed to the YKY for assemble then to the EMC for the production of the Air and Nitrogen Reflow for soldering machine. The company is located in Lot II-A, Block 22, Phase 4 Philippine Economic Zone Authority Rosario, Cavite Philippines started operating January of 2000. The capital invested to the company is Php 70,000,000 and the total lot area is about 5,246.63 square meters. The company has 200 employees. The ETC is producing parts for the Air and Nitrogen Reflow, it was being export inside the Japan, China and other Asian countries. Before the Eightech Tectron Phils is established it was first name is Eightech Manufacturing Corporation it began its operation in April of 1995, and separated from sister company Eightech Tectron Phils. Inc. on January of 2000 at EPZA, Cavite. Its product are the parts of Air and Nitrogen reflow for soldering machines which are exported outside the country such as Japan, Taiwan, China, and South Korea. The company's affiliate is Eightech Manufacturing Corporation. The parts of the Air and Nitrogen Reflow machine are what the ETC is producing. Eightech Techtron Philippines Inc. is a proud maker of quality parts of lead free Reflow Solder Machine that is trusted among big semiconductor companies.

1.3 STATEMENT OF THE PROBLEM

Eightech Techtron Philippines Inc. is experiencing an average of 3.9% defects in the making of parts of reflow machine that result to a loss of P 1,149,000.

1.4 OBJECTIVES OF THE STUDY

General Objective:

To reduce 3.9% defects in making of parts of reflow machine to the allowable 1% defects of the company.

Specific Objectives:

1. To improve the performance of the operator in the operation unit
2. To increase profit of the company
3. To be able to implement a new process in reducing all the rejects

1.5 SCOPE AND LIMITATIONS

The study and the data gathered would be limited at Eightech Techtron Philippines Inc. This company study only utilized the data that were observed and were identified as true causes of the problem. The researcher had a chance to interview and observed also the ways to focus on the defect parts that cause high loss for the company.