## CHAPTER ONE

# INTRODUCTION

#### 1.1 Background of the Study

Nowadays, many garment industries are getting better than after hitting by the economic crisis in 1998. We notice that there are many companies that had difficult time in manufacturing their product a couple years ago can now operate again and produce high quality product. (www.textile.web.id, Mendag:Kinerja Ekspor Industri TPT Masih Bagus)

This situation gets better after a lot of countries in the world become industrial countries which compete with one another. This reason makes Indonesia ready to face global market in the future. Many local companies in Indonesia are now ready to compete with their competitor in production, product quality, and time. To fulfil all the order from customers around the world it is better for a company to use standard ergonomics in their manufacturer because it can help the employees feel comfortable in doing

and finishing their job on time without chasing by the deadline and also can maximize employees' work. I propose to analyze ergonomics in sewing department at PT.XYZ. I choose this topic because I want to know the influence of ergonomics in designing tools and supporting facilities in sewing department.

PT. XYZ is chosen because it is a garment industry in Bandung which has some ergonomics problems in tools design and supporting facilities in the sewing department. These problems can cause accidents among the employees if the place where they work and the tools that they use are not suitable. The employees will not feel comfortable while working and they cannot focus on their works either. This situation can give a lot of bad impacts to the company and also to the employees.

Because of that, ergonomic aspects such as tools design and supporting facilities used need to be improved. Those kinds of problems can influence the quality and quantity of the product which are produced by the company.

#### **1.2 Identification of the Problem**

In this thesis I will analyze some ergonomics problems in designing tools and supporting facilities used in a garment company. I also find some problems such as the height of the chairs are too high and the chairs are not too comfortable to be sat on. 50% out of 30 employees in the sewing department have complained about it, because they cannot work well to finish their job. Moreover, the workstation in the sewing department is not comfortable either. The reason is the other departments are also situated in this room. This makes the room look too small.

The employees also say that they feel so uncomfortable while working and they have accidents and illnesses easily, they often have sprains, strains and musculoskeletal disorders. This makes the company fail to reach the target. The production is only about 80% - 95%.

Therefore, the identification of the problems are:

- What are the tools design and supporting facilities used in the sewing department at PT.XYZ?
- 2. What are the impact of tools design and supporting facilities on the employees' working conditions at PT.XYZ?
- 3. Which ergonomic tools design and supporting facilities should be

used in the sewing department at PT.XYZ?

## 1.3 Objectives and Benefits of the Study

#### 1.3.1 Objectives of the Study

- To describe the tools and supporting facilities that are used in the sewing department at PT. XYZ
- To find out the impact of tools design and supporting facilities on the employees' working conditions at PT. XYZ.
- 3. To find out the suitable tools design and supporting facilities that should be used in the sewing department at PT. XYZ.

## 1.3.2 Benefits of the Study

1. For the company

To help the company to develop ergonomic standard in designing tools and supporting facilities in the sewing department.

2. For readers

To broaden the knowledge about the application of ergonomics in designing tools and supporting facilities in a garment company especially in the sewing department.

#### 1.4 Limitations of the Study

I would like to focus the research on ergonomics in designing tools and supporting facilities only in sewing department at PT. XYZ, however, I do not make research about the cost of ergonomics in this company. I also find out the impact of tools design and support facilities on the employees' working conditions.

## 1.5 Layout of the Thesis

This thesis starts with the Abstract, a concise summary of the entire thesis in Indonesian. This Abstract is followed by the Declaration of Originality and the Preface, in which I acknowledge the work and contribution of other parties. After that is the Table of Contents, followed by four chapters:

- Chapter I is the introduction to the analysis
- Chapter II contains the library research
- Chapter III contains the result and discussion of the research
- Chapter IV contains the conclusion, my comments and suggestions.

In the final part, I present successively the Bibliography and Appendices