ERGONOMIC AND ANTHROPOMETRIC STUDY IN FURNITURE STYLE AND DESIGN

BY

KHAIRUL AIZAT BIN CHEK PI MOHD YAZID BIN ISTIHAT

ZULKIFLY BIN SHANI

Final Project Submitted In Partial Fulfillment For The Diploma in Wood Industry Faculty of Applied Science University Technology of Mara

APRIL 2006

ACKNOWLEDGEMENT

First of all, we would like to take this opportunity to express our special thanks to Almighty Allah S.W.T because with blessing and faith that brought us to complete our final project paper.

Besides that, we would like to thanks to our lover's advisor, Pn Norhafizah for her guidance in helping us at every phases of study. Every encouragement of advisers, comments and suggestions, we would like to express our most sincere thanks for her.

We also like to thank to our beloved parents for giving us some advice and moral support for our project paper. Thanks also for their prayers and bless us to success in learning. We really appreciate it.

Lastly, we also want to thanks for those are involved either directly or indirectly in completing our project paper and also special thanks to our friends. Well, we believe that without their helped, maybe we would never be able to complete this final project paper.

Thank you very much.

v

TABLE OF CONTENTS

PAGES

APPROVAL SHEET	i
DEDICATION	j
ACKNOWLEDGEMENT	1
TABLE OF CONTENTS	1
LIST OF TABLES	1
LIST OF FIGURES	1
LIST OF PLATE	i
ABSTRACT	,

CHAPTER

1.0 INTRODUCTION	
1.1 Definition of	design 3
1.2 History of Fu	rniture Styles/Design 4
1.3 History of Er	gonomic 7
1.4 Design basic	9
1.5 The principal	of design in furniture design 10
1.6 Objectives	
2.0 LITERATURE RE	VIEW 12
2.1 Ergonomi	c 12
2.1.1 Ph	vsical Ergonomics 14
2.1.2 Co	ognitive Ergonomics 14
2.1.3 Or	ganization Ergonomics 14
2.1.4 Ba	sic Element of Ergonomics 15
2.1.5 Int	teraction of ergonomic 17
2.1.6 Er	gonomic data 20
2.1.7 Sa	fety and stability consideration 21
	gonomic with aspect measure human body 21
	ontribution of ergonomics in workstation design 24
2.1.10 Er	gonomics and workers 30
2.1.11 Cu	irrent and Research Directions 31
2.2 Anthropo	metric32
2.2.1 Im	portance of the Human Body Dimensions 35
	vailability of Anthropometrics Data 36
	ructural data 40
2.2.4 Ai	thropometrics and its uses 42
2.2.5 Co	ost benefit analysis 43
3.0 DISCUSSIONS	
4.0 CONCLUSIONS	
5.0 REFERENCES	62
6.0 VITA	

LIST OF TABLE

TABLE	PAGE
1 Flow of the Style or Design	
2 Practicality Attributions	
3 Examples of the Factor Which Influence Working Posture	
4 Interactions of Ergonomics and Workers	. 29

ABSTRACT

ERGONOMIC AND ANTHROPOMETRIC STUDY IN FURNITURE STYLE AND DESIGN

BY

KHAIRUL AIZAT BIN CHEK PI, MOHD YAZID BIN ISTIHAT, and ZULKIFLY BIN SHANI

2006

The most important thing before make a design is the comfortability to user. This is because, to make that all the users get the comfortability when they are using it and realize the important things in designing and making the furniture. It also can be protected the user from injuries causes while they are use it. The causes like blood circulation always happen if the design not suitable for the user. It also to make sure all the user get all comfortability and realize the important things in designing furniture.

Ergonomic is about fit between people, the activities that their carry out the tool they use and the environment that they work and play in. some refer to it as user-centered design. If good fit is achieved, the physical and mental stresses on people are reduced. If not problem such as discomfort, physical injury, errors and reduced effectiveness can result. Ergonomics problems in the workplace are relatively common. The design of workstations, for example, can lead to operators adopting poor posture with excessive bending and or reaching. If tools are in appropriate for badly maintained they maybe damage to muscles or nerves due to vibration or because of the need to exert large forces.

X