

List of Figures

Figure No	Name of the Figures	Page No
Fig 4.1	Position for determining the thickness of skin folds.	26
Fig 4.2	Modified ten point scales to rate the discomfort experienced by the workers	29
Fig 4.3	Different segments of the body	29
Fig 4.4.	Different hand measurement	41
Fig 4.5	Subjective scale asked for paired comparison test.	42
Fig 5.1	Different type of posture in carpentry task	75
Fig 5.2	EMG records of different muscle	84
Fig 5.3	Four prototype models of chisel	106
Fig 5.4	Stimuli space of different prototypes for handle length of chisel	108
Fig 5.5	Stimuli space of different prototypes for handle diameter of chisel	109
Fig 5.6	Stimuli space of different prototypes for shape of chisel handle	111
Fig 5.7	Stimuli space of prototypes for grip of chisel handle	113
Fig 5.8	Types of rubber grip with different superficial texture used on the handle of the chisel.	114
Fig 5.9	Stimuli space of different prototypes for grip of chisel handle	115
Fig 5.10	Recommended design of the chisel	118
Fig 5.11	Mean productivity (area of wood finished per unit time) with existing and modified chisels (n=25).	122
Fig 5.12	Stimuli space of different prototypes for height of workstation	131
Fig 5.13	Mean productivity (area of wood planing in sq.cm/min) with existing and modified workstation	138
Fig 5.14	optimized dimension of the workstation	139