

LIST of TABLES

Table		Page
5.1	HCMI Variable levels used in the experimentation	79
6.1	Range, Mean and Standard Deviation of various data of the subjects (Study 1)	106
6.2	Experimental Design using L_{27} Orthogonal (Study 1).....	108
6.3	The S/N Ratios for Study 1	109
6.4	Sequence of each Performance Characteristic after Data Preprocessing(Study 1).....	111
6.5	The deviation sequences for Study 1.....	112
6.6	The calculated Grey relational coefficient and Grey relational grade and its orders for 27 comparability sequences for Study 1	114
6.7	Response table for Grey relational grade for Study 1	116
6.8	Results of the analysis of variance for Study 1.....	131
6.9	Results of confirmation test for Study 1	133
6.10	Range, Mean and Standard Deviation of various data of the subjects (Study 2)	143
6.11	Experimental Design using L_{27} Orthogonal (Study 2).....	145
6.12	The S/N Ratios for Study 2	146
6.13	Sequence of each Performance Characteristic after Data Preprocessing(Study 2)	148
6.14	The deviation sequences for Study 2	149
6.15	The calculated Grey relational coefficient and Grey relational	

	grade and its orders for 27 comparability sequences for Study 2	151
6.16	Response table for Grey relational grade for Study 2	153
6.17	Results of the analysis of variance for Study 2	169
6.18	Results of confirmation test for Study 2	171
6.19	Range, Mean and Standard Deviation of various data of the subjects (Study 3)	182
6.20	Experimental Design using L_{27} Orthogonal (Study 3)	184
6.21	The S/N Ratios for Study 3	185
6.22	Sequence of each Performance Characteristic after Data Preprocessing(Study 3)	187
6.23	The deviation sequences for Study 3	188
6.24	The calculated Grey relational coefficient and Grey relational grade and its orders for 27 comparability sequences for Study 3	190
6.25	Response table for Grey relational grade for Study 3	192
6.26	Results of the analysis of variance for Study 3	207
6.27	Results of confirmation test for Study 3	209
6.28	Range, Mean and Standard Deviation of various data of the subjects (Study 4)	220
6.29	Experimental Design using L_{27} Orthogonal (Study 4)	222
6.30	The S/N Ratios for Study 4	223
6.31	Sequence of each Performance Characteristic after Data Preprocessing(Study 4)	225
6.32	The deviation sequences for Study 4	226
6.33	The calculated Grey relational coefficient and Grey relational	