

LIST OF FIGURES

<u>Serial Number</u>	<u>Figure Number</u>	<u>Title</u>	<u>Page</u>
1	I.1	Location Map	5
2	I.2	Fireclay occurrence in Saurashtra	6
3	IV.1	Profiles of 1A,1B,1C,1D Mines around Thangadh	71
4	IV.2	Profiles of 2A,2B Mines around Khanpar and 3A,3B,3C Mines around Tarnetar	78
5	IV.3	Profiles of 4A,4B,4C Mines around Sadala; 5A,5B around Palasa and 6 around Gadhada	87
6	IV.4	Profiles of 7A,7B Mines around Ratidevali; 8A,8B around Vinaygadh and 9 around Lunsar	94
7	IV.5	Profiles of 10A,10B mines around Saltanpur; 11, around Matel; 12 around Paneli, 13, around Jambudia and 14 around Makansar	101
8	V.1	Plasticity Chart (IS-1498-1970)	148
9	V.2	Particle size analysis by Hydrometer Gadhada (6), Songadh (10) and Makansar (14)	152
10	V.3	Particle size analysis by Hydrometer Khanpar (2A), Palasa (5B) and Thangadh(1D)	154
11	V.4	Particle size analysis by Hydrometer Ratidevali (7B), Lunsar (9) and Jambudia (13)	156
12	V.5	Particle size analysis by Hydrometer Tarnetar (3A), Paneli (12) and Sadala (4C)	158
13	V.6	Particle size analysis by Hydrometer Matel (11), Vinay- gadh (8A) and Saltanpur (10)	160

<u>Serial Number</u>	<u>Figure Number</u>	<u>Title</u>	<u>Page</u>
14	V.7	Textural classes of fireclay	162
15	V.8	Fireclay showing presence of disordered Kaolinite (from DTA data).	188
16	V.9	Differential Thermal Analysis and Thermogravimetry of Fireclays of Saurashtra (6,7A,9,13)	193
17	V.10	Differential Thermal Analysis and Thermogravimetry of Fireclays of Saurashtra (8B,1D,5A,2A)	194
18	V.11	Dehydration curves of Fireclays from TGA data.	197
19	V.12	X-ray diffractograms (5B,4C,3A, 1C).	199
20	V.13	X-ray diffractograms (14,11,8A, 7B)	200
21	V.14	X-ray diffractograms, (Fireclay heated to 600°C and Fireclay treated with hot HCl)	205
22	V.15	X-ray diffractograms (Vertical Mineralogical variation)	218
23	VI.1	Scatter diagram of inclusive graphic skewness (SKI) versus graphic kurtosis (KG) (Mason and Folk method)	237
24	VI.2	Scatter diagram of inclusive graphic standard deviation (GI) versus inclusive graphic skewness (SKI) (Friedman's method)	242
25	VI.3	"CM Patterns" (Passega and Byramjee, 1969 method)	243
26	VI.4	Log-probability grain-size dis- tribution plots of Dhrangadhra sandstone (Underlying fireclay)	245
27	VI.5	Log-probability grain-size dis- tribution plots of Dhrangadhra Sandstone (Overlying fireclay)	246

<u>Serial Number</u>	<u>Figure Number</u>	<u>Title</u>	<u>Page</u>
28	VI.6	Log-probability grain-size distribution plots of Dhrangadhra sandstone (Overlying fireclay)	247
29	VI.7	Log-probability grain-size distribution plots of Dhrangadhra sandstone (Vertical profile-SA, SB)	248
30	VI.8	Log-probability grain-size distribution plots of Dhrangadhra sandstone (Vertical profile SC)	249
31	VII.1	A General Outline of the Successive Stages in the production of Refractories - followed by most of the Saurashtra Refractory Units.	270
32	VII.2	A Simplified Flow Sheet of Fireclay Brick Manufacturing Unit	271
33	VII.3	Flow Sheet of Sanitary ware and crockery ware Manufacturing Unit	272
34		Geological Map of Dhrangadhra Formation	Flap on back cover