

LIST OF TABLES

Table No.	Table captions	Page No.
2.1	Tabular Alumina specifications	37
2.2	AR78 specifications	38
2.3	Flake Graphite specifications	39
2.4	N220 specifications	39
2.5	Analytical reagents specifications	42
3.1	Variation of nano carbon black and a standard conventional Al ₂ O ₃ -C product	55
3.2	Properties comparison table	65
4.1	Formulation Al ₂ O ₃ -ZrO ₂ -C with different antioxidants	67
5.1	Formulation Al ₂ O ₃ -SiC-C with a combination of different antioxidants	87
6.1	Incremental mechanically activated magnesia in Al ₂ O ₃ -MgO-C	101
6.2	Processes involving the thermal profile	103
6.3	Crystallite size, dislocation density, and microstrain	104
6.4	Relative crystallinity (%).	105
7.1	Composition table demarcating different spinel formulations	115
7.2	Bulk density and apparent porosity of AMC briquettes	117
7.3	Slag composition	123