

ENERGY AUDIT STUDIES CARRIED OUT BY NCB (April 2002-March 2006)

Potential Energy Savings Identified (Plant-Wise)

PLANT	KILN(S) CAPACITY (tpd) AND PROCESS	POTENTIAL SAVINGS		
		THERMAL ENERGY Kcal/kg CL	ELECTRICAL ENERGY kWh/t CEM	ANNUAL COST, Rs LAKHS
1	• 1200 tpd, 6-ST, RSP CALCINER	35	0.78	98
2	• 600 tpd, 5-ST, DD FURNACE	50	-	47
3	• 1200 tpd, 4-ST, SP KILN • 1200 tpd, 4-ST, SP KILN	50 43	1.94*	281
4	• 1750 tpd, 5-ST, PH WITH NMFC • 1750 tpd, 5-ST, PH WITH NMFC	37 35	4.08	362
5	• 2800 tpd, 6-ST, SP & SLC • 3800 tpd, 6-ST, SP & ILC	22 22	5.60 7.20	269 466
6	• 3800 tpd, 4-ST, PH & ILC	13	4.43	269
7	• 3225 tpd, 5-ST, DOUBLE STRING PRECAL (PYROCLONE)	38	2.11	289
8	• 1800 tpd, PSC BASED GRINDING UNIT WITH VRM	-	3.00	62
9	• 2350 tpd, SEMIWET SLC PRECALCINER (NMFC)	16	3.69	146
10	• 300 tpd, 4-ST PREHEATER • 300 tpd, 4-ST PREHEATER	210	27	239
11	• 3300 tpd, 6-ST, DOUBLE STRING, SLC PRECALCINER	-	0.94	47
12	• 6000 tpd, 6-ST, DOUBLE STRING PRECAL	32	1.30	445
13	• 1800 tpd, 5-ST, PH & ILC	60	6.50	408
14	• 2500 tpd, 4-ST, SLC CALCINER (F L SMIDTH)	40	9.56*	512
15	• 2400 tpd, 4-ST, ILC PRECALCINER	16	2.82	150
16	• 2800 tpd, 6-ST, DOUBLE STRING PREHEATER & PRECALCINER (PYROCLONE)	7	4.33*	190
17	• 1215 tpd, 4-ST PREHEATER	45	14	350
18	• 2200 tpd, 6-ST, DOUBLE STRING PREHEATER & PRECALCINER (PYROCLONE)	19	3.29*	138
19	• 2400 tpd, 6-ST, DOUBLE STRING PREHEATER & PRECALCINER (PYROCLONE)	22	5.68*	295
20	• 3500 tpd, 6-ST, DOUBLE STRING PREHEATER & PRECALCINER (PYROCLONE)	4	3.75*	160
21	• 3300 tpd, 6-ST, INLINE PRECALCINER (POLYSIUS)	25	3.43*	293
22	• 3850 tpd, 5-ST PRECALCINER	68	5.98	588

23	• 85 tph GRINDING UNIT	-	5.30	85
24	• 4000 tpd, 4-ST ILC PRECALCINER	11	5.52	336
25	• 2800 tpd, 6-ST, SLC PRECALCINER • 2800 tpd, 6-ST, SLC PRECALCINER	39 44	7.84	834
26	• 4000 tpd, 6-ST, SLC PRECALCINER • 4300 tpd, 5-ST, SLC PRECALCINER	13.30 49.70	2.70* 2.40*	712
27	• 4000 tpd, 5-ST, SLC PRECALCINER	21.50	2.15*	224
28	• 2050 tpd, 4-ST PREHEATER • 2050 tpd, 4-ST PREHEATER	61.28 34.61	9.56*	618
29	• 2100 tpd, 5-ST, NMFC PC • 2100 tpd, 5-ST, NMFC PC	58.07 54.07	5*	268
30	• 1200 tpd, 4-ST PREHEATER • 3100 tpd, 5-ST, ILC PRECALCINER	173.62 77.40	-	945

* kWh/t CLINKER