

Hengya Cement (T) Co., Ltd

Estimated cost for cement project with annual output of 3.5 million tons

S/N	Project/Cost Item	Estimated Value (in ten thousand dollars)				
		Constructi on Engineeri ng	Equipment and Material	Installation Work	Others	Total Cost
	In total	11,445.38	23,851.17	3,714.09	14,043.60	53,054.24
	Part I :Project preliminary expenses				1,570.00	1,570.00
1	Project licenses, start-up cost				220.00	220.00
2	Expenses on mining right, land purchase and EIA				550.00	550.00
3	Preliminary investigation and consulting fee on mine area and factory				50.00	50.00
4	Expenses during project preparation				500.00	500.00
5	Temporary facility cost				250.00	250.00
	Part II :Static Investment	11,445.38	23,851.17	3,714.09	4,018.60	43,029.24
I	Costs on detailed investigation, design and pile foundation				1,100.00	1,100.00
1	Detailed investigation and design fees				500.00	500.00
2	Pile foundation fee				600.00	600.00
II	Plant Engineering	11,445.38	23,851.17	3,714.09	2,918.60	41,929.24
1	General graphic design and transportation engineering	589.07	119.05	0.95	-	709.07
1.1	Mine road	65.00				65.00
1.2	Three supplies and one leveling and enclosure in factory	80.00	100.00			180.00
1.3	Construction of enclosure road and drainage works	420.00				420.00
1.4	Measuring on incoming and outgoing of raw fuel and cement	24.07	19.05	0.95		44.07
2	Main production workshop in the plant	7,547.80	14,671.94	2,305.08	-	24,524.82
2.1	Limestone crushing and transportation	428.72	384.40	144.22		957.34
2.2	Limestone storage	300.16	1,591.16	283.41		2,174.73
2.3	Raw coal unloading and transportation	232.34	40.72	9.36		282.42
4	Raw coal storage	421.40	875.60	80.28		1,377.28
2.5	Auxiliary material temporary storage	229.66	-	15.00		244.66
2.6	Auxiliary material crushing and conveying	65.50	84.50	8.11		158.11
2.7	Auxiliary material storage	244.52	673.40	62.57		980.49
2.8	Raw material proportion station	64.39	154.07	42.92		261.38
2.9	Raw material mill	430.51	1,599.96	93.58		2,124.05
2.10	Kiln inlet exhaust system	259.17	942.02	110.84		1,312.03
2.11	Raw meal silo and kiln feeding system	568.85	456.37	171.90		1,197.12
2.12	Preheater	482.09	1,450.50	246.43		2,179.02
2.13	Coal mill	238.30	497.24	201.71		937.25
2.14	Rotary kiln and tertiary air duct	455.08	585.30	117.71		1,158.09
2.15	Grate cooler	258.97	706.70	38.77		1,004.44

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2.16	Kiln head exhaust system	129.80	347.30	23.52		500.62
2.17	Clinker warehouse	726.24	329.68	80.05		1,135.97
2.18	Clinker loading station	126.98	47.22	3.30		177.50
2.19	Cement proportion station	261.06	123.79	52.44		437.29
2.20	Cement mill	372.02	1,551.80	205.82		2,129.64
2.21	Cement storage and in bulk	774.48	535.50	61.33		1,371.31
2.22	Cement in baggs	198.08	751.22	121.30		1,070.60
2.23	Water treatment and cyclical water tower	23.76	45.30	4.17		73.23
2.24	Air compressor room	19.72	47.50	4.57		71.79
2.25	General distribution device	38.65	11.86	1.02		51.53
2.26	Central control room and QC laboratory	184.45	66.39	0.85		251.69
2.27	Process pipeline for production	12.90	136.34	23.54		172.78
28	Insulation and refractory materials	-	636.10	96.36		732.46
3	Electric automatization	65.08	1,069.07	217.47	-	1,351.62
3.1	Central control room	8.38	151.65	32.05		192.08
3.2	Electrical room for limestone crushing	12.21	67.25	26.90		106.36
3.3	Electrical room for auxiliary materials crushing	6.45	31.43	10.30		48.18
3.4	Electrical room for raw material mill	4.39	128.55	18.10		151.04
3.5	Electrical room for firing	5.28	110.67	15.90		131.85
3.6	Electrical room for coal mill	5.78	91.50	15.03		112.31
3.7	Electrical room for cement mill	9.29+	177.18	29.45		206.63
3.8	Electrical room for packaging system	5.07	128.60	24.22		157.89
3.9	General layout of the factory power (including lighting and lightning protection)	14.17	159.04	36.85		210.06
3.10	Factory communication	3.35	23.20	8.67		35.22
4	Water supply and drainage engineering	137.21	271.18	30.77	-	439.16
4.1	Raw water pond and pump house	80.21	51.43	5.79		137.43
4.2	Circulating pond and pump house	21.70	68.63	4.95		95.28
4.3	Sewage treatment	3.10	43.02	3.44		49.56
4.4	Water supply and drainage pipe network of plant	32.20	108.10	16.59		156.89
5	Support facilities	924.99	502.43	127.29	-	1,554.71
5.1	Guard	50.50	4.45	1.80		56.75
5.2	Administrative office and living area	306.00	245.00	95.00		646.00
5.3	Boiler room	2.30	23.02	1.90		27.22
5.4	Billing room and shop	61.53	9.84	0.48		71.85

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5.5	Security guard dormitory	57.69	2.06	0.32		60.07
5.6	Other planning area	35.18	10.70	1.27		47.15
5.7	Toilet	15.38	6.50	3.70		25.58
5.8	Mechanical repair workshop	99.23	110.70	10.30		220.23
5.9	Logistics workshop	90.50	20.00	5.00		115.50
5.10	Warehouse	95.08	60.80	5.60		161.48
5.11	Material department	35.80	2.86	0.32		38.98
5.12	Materials storage for mine blasting	75.80	6.50	1.60		83.90
6	Other Costs of Engineering Construction				2,900.00	2,900.00
6.1	Transportation fees of equipment and material				2,600.00	2,600.00
6.2	Joint test fun fee				180.00	180.00
6.3	Production staff training fee				120.00	120.00
7	Purchase of spare parts		650.00			650.00
8	Costs of mining and transportation equipment		2,558.96			2,558.96
8.1	Mining equipment		1,563.96			1,563.96
8.1.1	Excavator		287.90			287.90
8.1.2	Down-the-hole drill		136.90			136.90
8.1.3	Loader		230.66			230.66
8.1.4	Pneumatic Drill		22.30			22.30
8.1.5	Air compressor		29.30			29.30
8.1.6	Fuelling vehicle		36.90			36.90
8.1.7	Watering cart		23.80			23.80
8.1.8	Pike-up truck		46.20			46.20
8.1.9	Heavy-duty dump truck		495.00			495.00
8.1.10	Bulldozer		40.00			40.00
8.1.11	Other equipment		215.00			215.00
8.2	Mobile transport equipment of raw fuel		995.00			995.00
8.2.1	Heavy-duty dump truck		980.00			980.00
8.2.2	Other equipment		15.00			15.00
9	2*25MW captive power station and 12MW waste heat power recovery system	2,016.23	3,573.54	982.53	18.60	6,590.90
9.1	Main production workshop in the plant	1,701.23	2,895.54	774.53	18.60	5,389.90
9.1.1	2*25MW captive power station	1,078.75	2,271.25	623.75		3,973.75
9.1.2	Chemical water treatment	14.28	8.19	2.10		24.57

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9.1.3	Cooling tower	19.95	28.35	4.83		53.13
9.1.4	12MW waste heat power recovery system	588.25	587.75	143.85	18.60	1,338.45
9.2	Electric automatization	315.00	678.00	208.00	-	1,201.00
9.2.1	Main production workshop in the plant	315.00	678.00	208.00		1,201.00
10	Concrete Mixing workshop, equipment	165.00	435.00	50.00		650.00
	Part III: Dynamic Investment				8,455.00	8,455.00
1	Financing cost				5,500.00	5,500.00
2	Working capital for production				1,800.00	1,800.00
3	Tariff, VAT on equipment and customs clearance fees				1,155.00	1,155.00