

SIZE OF CEMENT INDUSTRY IN INDIA

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THE size of industrial units has varied from time to time and also at the same time under different circumstances.¹ A plant considered large at one time may become small after some lapse of years.² Thus the change in various factors over a number of years affects size of plants. This change is continuous and quite rapid. The inertia, however, is greater in case of plants that need heavy capital expenditure, creating a lag between current size (for new plants and additions) and the general prevailing size (for the existing plants). The various factors affecting size of plant in respect of Cement industry are as follows :

1. *Technical* : Before 1873, it took about a week before 40,000 lbs. of cement were out. The rotary kiln was made in 1873 having a length of 50' and by 1909, kilns of 150' length were possible (Glover : 1946 : 502). The modern kilns have a length of 300' to 500' with a diameter of 9' to 14' (Burn : 1961 : 319). The output of plant has been increasing with an increase in the length of the kiln. The whole set of machinery is adjusted to the size of the kiln. The average capacity of kilns delivered by European machinery manufacturers outside Europe gives a good idea of the progress made in plant capacity :

1905-14	30,000	tons per annum
1915-20	60,000	" " "
1921-29	76,000	" " "
1930-34	1,06,000	" " "
1935-38	98,000	" " "
1939-44	92,000	" " "
1945-50	1,22,000	" " "

(Burn : 1961 : 322)

For technical developments India has essentially relied on Europe. The size of kilns in use in India mainly belongs to after 1934 period. A comparison of average kiln capacity is as follows :³

For the period 1951-56 the average kiln size in India comes to 1,07,000 tons whereas for 1956-61 period it is 1,60,000 tons per annum