



Reducing CO₂ Emission by using Blended Cement of Mathematical Modeling

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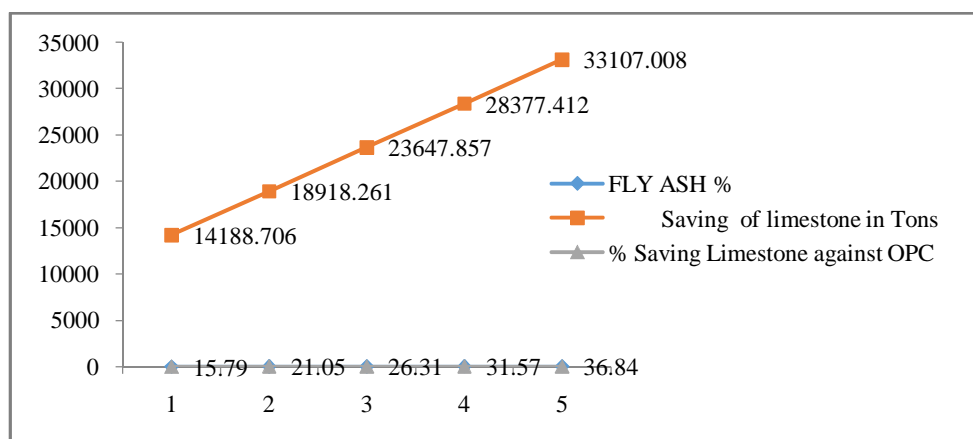
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Accepted on 30th May, 2019

ABSTRACT

A Mathematical model based on the dynamic interactions among a number of system components is developed to estimate CO₂ emissions from the cement industry in India. The paper focuses on the problem of limestone that will be faced by cement industry in future. As per IBM survey we have limestone for 35-41 years. By using PPC and PSC we save limestone from 16% to 37% and 26% to 74% respectively. This saving increases the reserve of limestone from 14187 to 66214 million tonnes and thus extends the life of reserve limestone from 47 to 71 years.

Graphical Abstract



On PPC production varying fly ash % against OPC.

Keywords: CO₂ Emission, Cement Industry, Fly Ash, Green houses Gases, Fossil fuel, Carbon black, Energy Recovery.