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Use of Wheat Straw Ash as a Partial Replacement to Cement - A Review

Alka A. Avasthi¹, Sampat N. Nanaware², Pratibha B. Patil³, Varsha S. Takalkar⁴, Vijeta N.Kundlikar⁵

Head of Department, Pimpri Chinchwad Polytechnic, Pune, Maharashtra, India¹ Lecturer, Pimpri Chinchwad Polytechnic, Pune, Maharashtra, India^{2,3,4,5}

Abstract: The present study investigates the use of wheat straw ash(WSA) as a partial replacement to cement by weight in concrete. India is a major wheat producing nation in the world. Hence a lot of agricultural waste is generated from the milling process of wheat. This waste is mostly burnt in the fields to avoid the cost related with disposal. Investigations by researchers revealed that the ash obtained from the burning process was rich in silica and its elemental composition indicated presence of around 75% silica in the ash. Silica dioxide is responsible for high strength of concrete. In this study the author reviews various studies related to wheat straw ash and its effect on the mechanical and durability properties of concrete.

Keywords: Wheat Straw Ash, Mechanical Durability, Permeability, Pozzolanic.

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