

USE OF FUZZY NEURAL NETWORKS TO STUDY THE PROPER PROPORTIONS OF RAW MATERIAL MIX IN CEMENT PLANTS

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The study of proper proportions of material mix in cement industries is very difficult due to the inconsistency in the chemical composition of raw materials. Further the raw mix should maintain fixed ranges for a specific quality of cement. The problem of satisfying this range involves a lot of randomness and uncertainty which in turn speaks about the desired quality of the clinker. Since all terms used to determine the proper proportions of material mix is very ambiguous, we felt it would be proper to use fuzzy theory approach to study the problem. In this paper we adopt fuzzy relation equations and fuzzy neural networks to find the correct proportion of raw mix so that the desired quality of the clinker is achieved.

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