Blended Cements with Industrial Solid Waste (Fly Ash and Fe-Ni Slag) and some Characteristics of Concretes Produced with Them

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Abstract: This work presents some physico-mechanical properties of a series of cement produced with fly ash (calcareous type) and slag (Fe-Ni) which are by-products of the industry in Republic of Kosovo. The influence of the amount of additives on physico-mechanical properties of cements produced by them has been studied. With the blended cements that were produced with the optimal by-product content, being about 15%, concrete samples have been produced. Compressive strength and pore size distribution using mercury porosimetry as well as and electrochemical (impressed voltage) tests have been carried out on steel reinforced concrete samples that were prepared respectively with fly ash and slag cements.

Key words: blended cements, industrial solid waste, fly ash, slag (Fe-Ni), concrete, corrosion

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