

ABSTRACT

Slag has many commercial uses, and is rarely discarded. It is often reprocessed to separate any other metals that it may contain. The remnants of this recovery can be used in railroad track ballast, and as fertilizer. It has been used as a road base materials and as a cheap and durable means of roughening sloping faces of seawalls to progressively arrest the movement of waves. Blocks of slag have been used in the construction of retaining walls and foundations. Industrial wastes and byproducts have to be disposed off properly so that their environmental impacts are minimized. Alternatively, some of these materials can be utilized in recycling processes, manufacturing of new products, or as construction materials. This paper presents an effective way of utilizing the steel slag, which is a byproduct of the steel manufacturing process, in road construction. A comprehensive study was conducted to characterize steel slag and determine the potential for its use in road bases. Testing results indicated that steel slag is an environmentally safe product and has physical and chemical properties that make it an excellent candidate for road base construction. Laboratory and field data have shown the superior performance of steel slag over the locally available calcareous sediments. Research work was conducted at the Uzbek Company "Uzmetkombinat" with regard to their successfully use for earthwork and road construction purposes in Uzbekistan.