

Abstract

CEN Standardization for Slag Bound Mixtures

John Kennedy, Pavement Engineering Consultant
Marlow, Buckinghamshire, UK

ABSTRACT: Over the last 10 years, standards and associated test methods have been developed for hydraulically-bound mixtures by Working Group 4 of CEN Technical Committee 227, 'Road Materials'. Altogether standards covering 9 types of HBM, one constituent standard and 19 test methods are being developed. They are all at various stages of development but the intention is that they will be ready for public use in 2003. Of the 9 types of HBM, 2 specifically concern slag. They are titled; 'Slag-bound mixtures' and 'Soils treated by granulated blast furnace slag'.

Overall, these 2 standards cover mixtures incorporating, granulated blast furnace slag, air-cooled blast furnace slag and air-cooled steel slag.

This paper describes the scope of the 2 standards, the types of mixtures included, permitted constituents and the methods of characterization and classification for laboratory mechanical performance and other relevant requirements.

Biographical Details

JOHN KENNEDY

BSc, CEng, MICE, MIHT, MICT

Practice: John Kennedy, Consulting Civil & Pavement Engineer
Established: 1985
Location: Marlow, Buckinghamshire, UK
Qualifications: BSc Civil Engineering
Chartered Engineer
Member of the Institution of Civil Engineers
Member of the Institution of Highways and Transportation
Member of the Institute of Concrete Technology

PROFILE: John runs his own consultancy and is a pavement engineer with considerable experience in the design and specification of pavements, their construction and testing, and their condition evaluation and strengthening.

In particular, he has specialist expertise in the use of secondary materials and processes including earthworks improvement, insitu stabilisation using lime and/or cement, deep lift insitu recycling, industrial by-products, and the use of lime/pozzolana/fly ash/ggbs binder combinations.

In addition, he has detailed experience and knowledge of UK and overseas pavement design systems, including those used by motorway operators, as well as analytical design techniques.

In the early years of his consultancy, 1987 to 1990, John jointly established and managed Econopave, a specialist paving contractor providing the on-site production and lay of hydraulically-bound mixtures. During this time, the company successfully produced and laid many thousands of tonnes of material for trunk roads, airfields and port schemes.

He is the author of many technical papers, reports and publications and is the UK expert on the CEN Technical Committee, TC227/WG4/TG4, producing European standards for roads including the standard for 'lime treated mixtures' and the standards for 'hydraulically bound mixtures' involving the binder combinations, lime/slag and lime/fly ash (pfa).

Contact: jkconsultingeng@hotmail.com