FACTORS AFFECTING THE WET TRACK ABRATION OF SLURRY SEAL MIXTURES

A.F. NIKAIDES, N.ECONOMOU, A.D.DOUKAS, A.FANOULES

ABSTRACT

This paper examines the factors affecting the wet track abration of slurry seal mixtures. The factors examined were the incorporation of Latex into the emulsion and the bitumen content of the mixture. Their effect was evaluated by employing the Wet Track Abrasion Test. Prior to the examination of the effect of the above factors, the effect of Latex on the properties of the bitumen was also examined. This was obtained by carrying out the Penetration, Softening Point and modified Ductility Test (percentage of recovery).

The results showed that the incorporation of Latex reduces the penetration, increases the softening point and improves the elasticity of the bitumen. Loss in weight by Wet Track Abrasion Test is reduced further due to the presence of Latex. Optimum percentage of Latex in the emulsion was found for minimum loss of weight. This was 3%-4% by weight of emulsion. However the bitumen content of the mixtures is the governing factor in the Wet Track Abrasion Test.