

STUDY OF ASPHALT MIXTURES MODIFIED WITH TIRE RUBBER

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ABSTRACT

In Greece the annual deposit of worn mobile tires comes up to many thousands. In the frame of the effort for protecting the environment from the disposal of such solid wastes worldwide, in Greece laws no 109/75/2004 is issued concerning the terms and the means for the alternative use of worn mobile tires.

A widely popular application of these tires is their addition in road construction projects. Tire rubber particles of different gradation may be used either to modify binder properties “wet process”, or as a rubber aggregate “wet process”. This paper studies the behaviour of bituminous mixtures modified with rubber particles from worn mobile tires using the dry process and results are presented. At the same and for the first time microstructure of specimens, produced by the use of dry process, was examined.

KEY WORDS: Bituminous mixtures, worn tires, microstructure