

MODIFIED BITUMEN: QUALITY CONTROL AND PROPOSED SPECIFICATIONS

N. D. ECONOMOU, G. S. SAVVOPOULOS

ABSTRACT

This paper examines the production process of modified bitumen and the effect of elastomer and plastomer modifiers on the properties of bitumen. Its aim is to submit a proposal for Greek specifications on Polymer Modified Bitumen. The additives chosen, are block copolymers of styrene-butadiene-styrene (SBS), and ethyl-vinylacetate (EVA). Properties recorded herein are penetration, softening point, ductility, elastic recovery and Fraas breaking point before and after Rolling Thin Film Oven Test.

Modified bitumen is used all around the world and our country has already experience on such products to some extent. It is necessary though to set some Greek specifications in order to assure good quality not only for the modified bitumen but the road pavement also. Two types of modified bitumen are proposed herein in order to cover different applications.