

## **EVALUATION OF PREDICTIVE MODELS FOR THE RHEOLOGICAL PROPERTIES OF PAVING ASPHALT BINDERS**

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### *ABSTRACT*

In 1954, Van der Poel introduced the concept of bitumen stiffness modulus as a function of temperature and time of loading and a nomograph was proposed for estimating this rheological property based on empirical conventional results. Later, during the SHRP Program the Dynamic Shear Rheometer was adopted as a powerful instrument to characterize the physical properties of bituminous materials. This paper reviews the literature referring to models and procedures used to estimate or predict the rheological properties of asphalt binders based on routine conventional testing results and to evaluate these models using both graphical and goodness-of-fit statistical analysis methods using the information contained in a specially developed database.