

STUDY OF WARM ASPHALT ADDITIVES ON BITUMEN BINDERS AND MIXTURE PROPERTIES

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ABSTRACT

A study was performed of asphalt mixtures produced with low temperature additives using two types of binders delivered from two different refineries. The rheological properties were tested of the binders with and without low temperature additives. It was observed that one of the low temperature additives Sasobit changes the rheological behaviour of the binder. The mechanical properties were tested of the asphalt mixtures produced with neat bitumen as well as bitumen with low temperature additives. The results show that the mechanical properties of the asphalt mixtures prepared with low temperature additives are comparable with those produced with neat bitumen, despite the fact that they were mixed and compacted at lower temperatures.